

TRAFFIC IMPACT ANALYSIS

LAS COLINAS DETENTION FACILITY EXPANSION

SAN DIEGO, CALIFORNIA

Prepared for:

County of San Diego

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GLOSSARY

Level of Service (LOS) corresponds to "excellent" through "failure" conditions in terms of traffic congestions, both for road segments and for intersections. It is used to provide an indication of the amount of delay a driver would experience along a road segment or the amount of wait time a driver would experience at an intersection. *LOS* is rated on a scale of A through F, with A representing excellent, free flow condition, and F representing failures of road segments or intersections.

Volume to Capacity (V/C) Ratio is ratio of the actual traffic volume of a road segment or intersection to the design capacity of the road segment or intersection. It is used to provide an estimate of the LOS of the road segment or intersection.

AM or PM Peak Hours are those hours of the day in which the bulk of commute trips occur and in which traffic impacts are likely to be the greatest.

Average Daily Traffic (ADT) is the number of vehicles that use a roadway segment within a 24-hour period.

Capacity of a transportation facility is the maximum number of persons or vehicles that can be expected to traverse a point or uniform section of road within a specified time frame under prevailing roadway, traffic and control conditions. Theoretically, this is the point in which the flow rate (vehicles/hour) on the facility is the highest. The highest volume attainable under LOS E has been designated as the capacity of the roadway.

EXECUTIVE SUMMARY

This report provides a Traffic Impact Analysis (TIA) for the Las Colinas Detention Facility project located on County of San Diego owned land in the City of Santee. Plans call for construction of a replacement Las Colinas Detention Facility consisting of a 45-acre open campus-style development with multiple buildings. The location of the proposed expanded new facility includes the existing Las Colinas site and a portion of the adjacent Egdemoor site. The new facility would be constructed as a women's detention facility with 1,216 beds. The traffic study uses the increment of 616 beds (proposed 1,216 beds minus existing 600 beds) for trip generation purposes. The facility would include inmate housing, support facilities and training and administrative services encompassing approximately 512,537 square feet.

A TIA has been requested by County staff in order to determine the direct and cumulative impacts of the project on roadway segments and intersections in the vicinity of the project site.

The project is expected to generate 1312 daily trips, 67 AM peak hour trips and 87 PM peak hour trips. These trips were assigned to roadways in the vicinity of the project site and the resulting traffic increases were compared to County standards for the determination of traffic impacts.

There are no direct impacts of the project to the intersections or roadway segments within the study area. The project has cumulative impacts affecting one roadway segment and three intersections in the study area. These impacts are summarized below:

ROAD SEGMENTS

Cumulative impacts are expected to cause the following segment within the study area to be reduced below LOS D in the future with project (2030) conditions:

1. Magnolia Avenue between Mission Gorge Road and future Riverview Parkway

INTERSECTIONS

The project has cumulative significant impacts at the intersections of Mission Gorge Road / Cuyamaca Street and Prospect Avenue / Magnolia Avenue in the opening day conditions. The project has cumulative significant impacts at the intersections of Mission Gorge Road / Cuyamaca Street, Mission Gorge Road / Magnolia Avenue and Prospect Avenue / Magnolia Avenue in the future with project (2030) conditions. Table 1 shows the summary of impacts.

As per County of San Diego guidelines, if the cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts. Below is the project's percentage of traffic contributing to the cumulative impact at three intersections and one roadway segment within the project area.

The ADT component of the project of the total cumulative impacts for the segment of Magnolia Avenue between Mission Gorge Road and future proposed Riverview Parkway is 1.37%.

The ADT, AM and PM component of the project of the total cumulative impacts at the intersection of Mission Gorge Road / Magnolia Avenue is 0.24 % in the ADT, 0.52 % in the AM peak hour and 0.19 % in the PM peak hour.

The ADT, AM and PM component of the project of the total cumulative impacts at the intersection of Mission Gorge Road / Cuyamaca Street is 2.90 % in the ADT, 2.90 % in the AM peak hour and 1.32 % in the PM peak hour.

The ADT, AM and PM component of the project of the total cumulative impacts at the intersection of Prospect Avenue / Magnolia Avenue is 2.40 % in the ADT, 2.77 % in the AM peak hour and 3.20 % in the PM peak hour.

Using the percentages provided above, the project in discussion with the City of Santee can contribute its fair share to the estimated improvement costs provided in the City of Santee Traffic Improvement Master Plan in order to mitigate its cumulative impacts at the three intersections and one roadway segment discussed above. However, even after the project contributes its fair share to the estimated improvement costs provided in the City of Santee master plan, the project's cumulative impacts would not be fully mitigated because the County does not have the ability to implement the improvements and it cannot ensure that the mitigation will be in place prior to the realization of the project's impacts.

TABLE 1: SUMMARY OF IMPACTS

Impact Area	Type of Impact	Recommended Mittgation
SEGMENT		
Magnolia Ave, Mission Gorge Road - Riverview Parkway	Cumulative	Mitigation through fair sharw contribution to the City of Santee Traffic
		Improvement Master Plan identified road improvement*
	A CONTRACTOR OF THE PROPERTY O	
INTERSECTIONS		
Prospect Avenue / Magnolia Avenue	Cumulative	
Mission Gorge Road / Cuyamaca Street	Cumulative	Migation through fair share contribution to the City of Santee Traffic
Mission Gorge Rd / Magnolia Ave	Cumulative	Improvement Master Plan identified road improvement*

* Mitigation will not fully mitigate impacts below level of significance

TRAFFIC IMPACT ANALYSIS COUNTY OF SAN DIEGO, CALIFORNIA

LAS COLINAS DETENTION FACILITY PROJECT

1.0 INTRODUCTION

1.1 PURPOSE OF TRAFFIC IMPACT STUDY

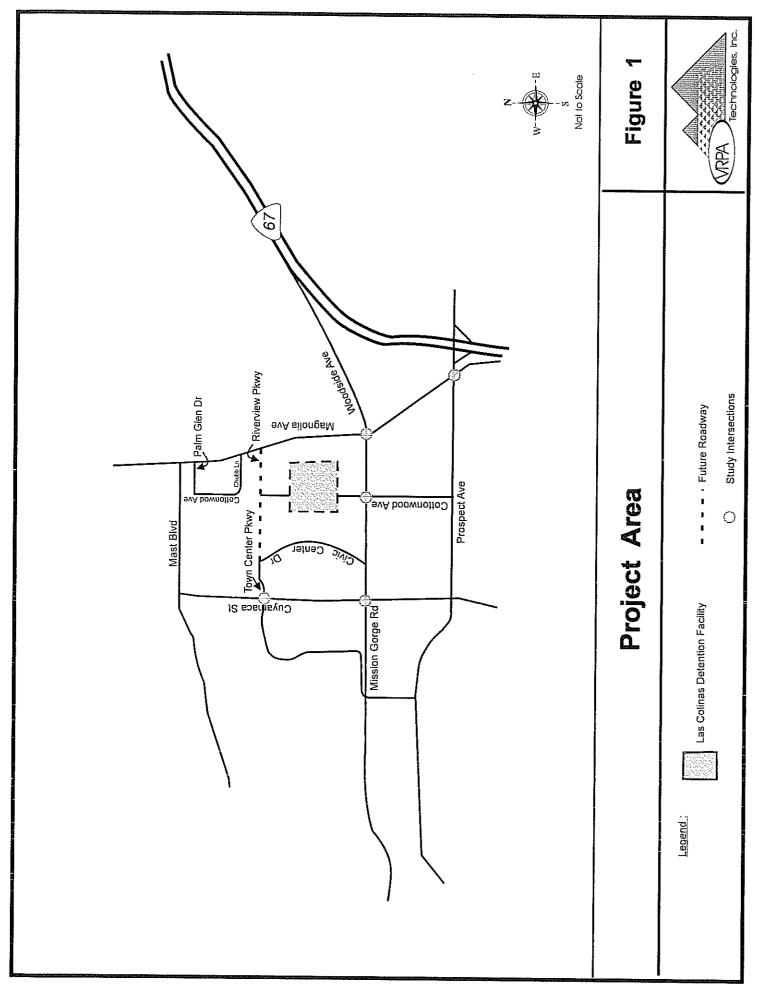
This Traffic Impact Analysis (TIA) has been prepared for the purpose of analyzing traffic conditions and identifying potential traffic impacts related to the redevelopment and expansion of the existing Las Colinas Detention Facility located on County of San Diego owned land in the City of Santee, California.

1.2 PROJECT LOCATIONS AND DESCRIPTION

The existing Las Colinas Detention Facility is located on Cottonwood Avenue, north of Mission Gorge Road on County owned land that lies within the boundaries of the City of Santee. The facility is operated on a 15.98-acre site due west of the 42.3-acre Edgemoor Skilled Nursing Center. The existing facility is 118,755 square feet. The study area for this TIA is shown in Figure 1. The proposed larger and expanded detention facility is identified hereafter as the "project".

The project proposes the construction of a replacement Las Colinas Detention Facility consisting of an open campus style development with multiple buildings. The location for the proposed new facility includes the existing Las Colinas site and a portion of the adjacent Edgemoor site to encompass a total of approximately 45 acres. The new facility would be constructed as a 1,216 bed women's detention facility and would include inmate housing, support facilities and training and administrative services encompassing approximately 512,537 square feet. The project site plan is shown in Figure 2. Table 2 shows a comparison between the existing detention facility and the proposed expanded detention facility.





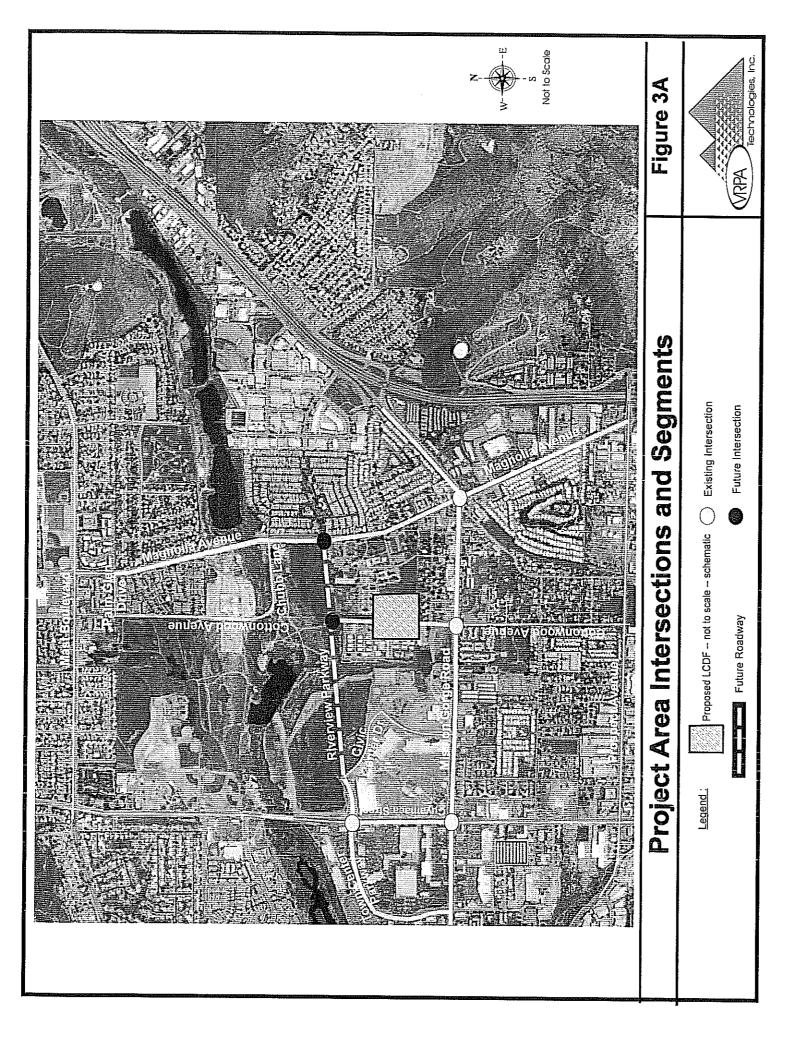


TABLE 2 : COMPARISION BETWEEN EXISTING AND FUTURE PROPOSED LCDF

	Existing LCDF	Future Proposed LCDF
Project Site Acreage	15.98 acres	45 acres
Number of Inmates	600-800	1216
Square Footage	118,755 G.S.F.	512,537 G.S.F.

2.0 EXISTING CONDITIONS

2.1 EXISTING TRANSPORTATION CONDITIONS

Figure 3A shows the intersections and segments in the study area. Existing intersection lane geometry in the study area is shown in Figure 3B. All the intersections within the study area are currently signalized.

The first step toward assessing project traffic impacts was to assess existing traffic conditions. Existing average daily traffic counts in the study area were calculated from peak hour turning movement counts conducted by VRPA Technologies. AM and PM peak hour turning movement counts were recorded at each study area intersection in April 2007. Appendix A includes the traffic count data collected for the study area intersections. The resulting traffic is shown in Figures 4, 5 and 6.

The study area for the traffic impact analysis included the following street segments and intersections:

Street Segments:

- Mission Gorge Road between Town Center Parkway and Cuyamaca Street.
- Mission Gorge Road between Cuyamaca Street and Cottonwood Avenue.
- Mission Gorge Road between Cottonwood Avenue and Magnolia Avenue.
- Town Center Parkway between Mission Gorge Road and Cuyamaca Street.
- Town Center Parkway/Riverview Parkway between Cuyamaca Street and Magnolia Avenue (future only).
- Magnolia Avenue between Mission Gorge Road and Riverview Parkway (future only).
- Magnolia Avenue to the north of Riverview Parkway (future only)
- Magnolia Avenue between Mission Gorge Road and Prospect Avenue.
- Woodside Avenue between Magnolia Avenue and SR 67.

Intersections:

- Cuyamaca Street & Town Center Parkway
- Mission Gorge Road & Cuyamaca Street
- Mission Gorge Road & Cottonwood Avenue
- Mission Gorge Road & Magnolia Avenue
- Prospect Avenue and Magnolia Avenue



- Riverview Parkway & Cottonwood Avenue (Future only)
- Riverview Parkway & Magnolia Avenue (Future only)

The study area was determined using guidelines for Traffic Impact Analysis prepared by the County of San Diego (County of San Diego, Report Format & Content Requirements for Transportation and Traffic, September 26, 2006 and revised effective December 5, 2007). All segments receiving over 200 ADT were selected as a part of the study area as per County of San Diego Guidelines. All intersections receiving over 25 peak hour trips were selected as a part of the study area as per County of San Diego guidelines. Calculation of project trips was determined using trip generation and trip distribution information described in Chapter 3.

2.2 STREET NETWORK

The following is a brief description of the roadway system in the study area.

Mission Gorge Road is classified as a Major Arterial from the western city limits to SR 125 and a Prime Arterial from SR 125 to Magnolia Avenue. This roadway extends from Magnolia Avenue in Santee to Interstate 8 in San Diego. Mission Gorge road is currently a six lane roadway.

Town Center Parkway is classified as a Parkway between Mission Gorge Road and Civic Center Drive and is currently constructed as a six-lane roadway between Mission Gorge Road and Cuyamaca Street and a four lane roadway transitioning to a two-lane roadway between Cuyamaca Street and Civic Center Drive.

Cuyamaca Street is classified as a Major Arterial within the City of Santee. It extends from Fletcher Parkway in El Cajon to just north of El Nopal in Santee. Cuyamaca Street varies as a four-lane or six-lane roadway between Prospect Street and Mast Boulevard.

Magnolia Avenue extends from El Cajon to Princess Joann Road in the northern section of Santee and is classified as a Prime Arterial from Mission Gorge Road to Prospect Avenue and a Major Arterial from Mission Gorge Road to Mast Boulevard. Magnolia Avenue has six lanes between Prospect Avenue and Mission Gorge Road. Magnolia Avenue has four lanes between Mission Gorge Road and Mast Boulevard.

Riverview Parkway is a planned roadway to the north of the Detention Facility. The existing Civic Center "Riverview Parkway" is built from Mission Gorge Road to Town Center Parkway. Town Center Parkway to the western boundary of the existing LCDF is currently under construction. Future Riverview Parkway will be built from the LCDF project's western boundary to Magnolia Avenue according to the Riverview Office Park Tentative Parcel Map (TPM 2005-04, recorded December 21, 2006) and will be extended as a part of the Santee Office Park project approved by the City of Santee.

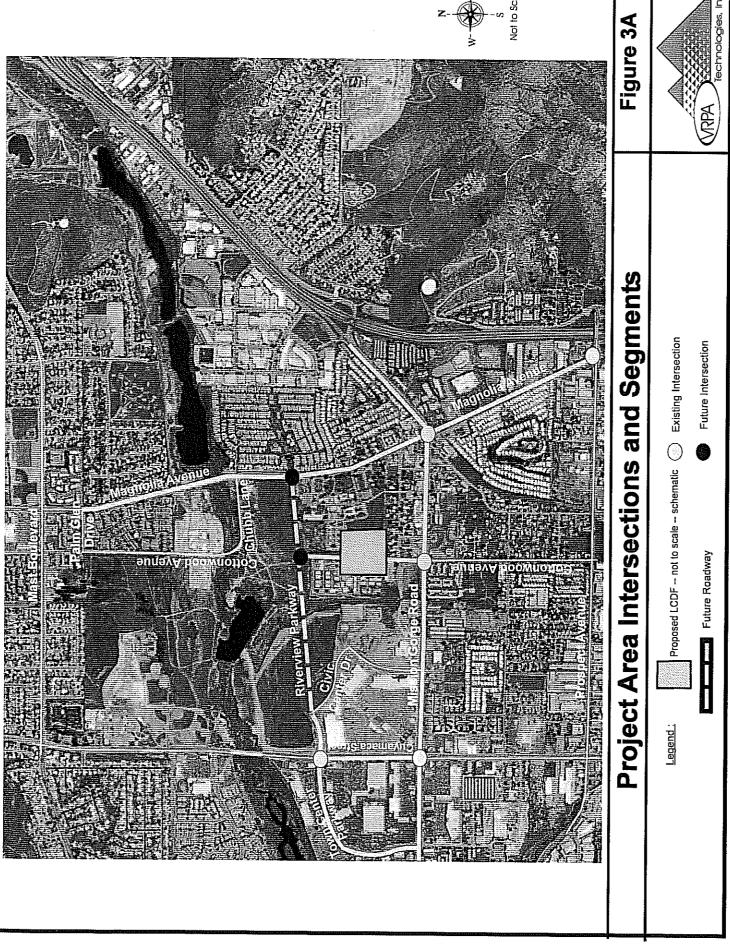


Riverview Parkway is expected to be completed before the opening day of the Las Colinas Detention Facility. On opening day, Riverview Parkway is expected to be a two lane road from Civic Center Drive to Magnolia Avenue. Opening day scenario for the Las Colinas Detention Facility is conditioned on the extension of Riverview Parkway. Riverview Parkway is also shown as planned roadway in the City of Santee Circulation Element for horizon year 2020. In the future horizon year 2020, Riverview Parkway is expected to be a four lane road extending from Civic Center Drive to Magnolia Avenue. However, in the event that timing for construction of Riverview Parkway does not coincide with the construction schedule for the proposed project, additional scenarios for constructing an access road as described below.

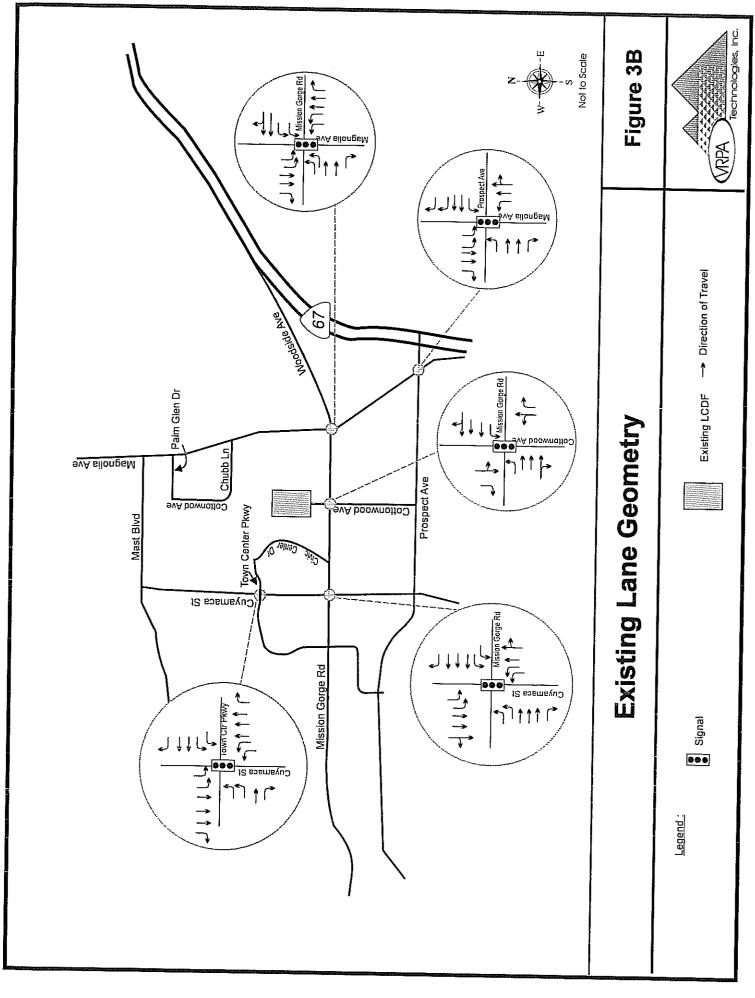
An application for a Conditional Use Permit has been filed with the City of Santee for the proposed Liberty Charter School to be located on the north side of future Riverview Parkway approximately 500 feet west of Magnolia Avenue. Access for the proposed school is to be provided by construction a two lane portion of Riverview Parkway approximately 1000 feet ending approximately 250 feet east of the proposed location for the LCDF project. It is anticipated that the Liberty Charter School project would be completed in 2009 which would be well before the completion of the Phase I construction of the LCDF in 2013. Therefore, most of the Riverview Parkway needed for access to LCDF Phase I would be in place before Phase I is constructed and the County would need to construct the remaining 250 feet to the proposed entrance. If the portion of Riverview Parkway need for the Liberty Charter School is not built when the County completes Phase I of the LCDF project, the County would construct the portion of the road to two lanes from Magnolia Avenue to the access of the new facility.

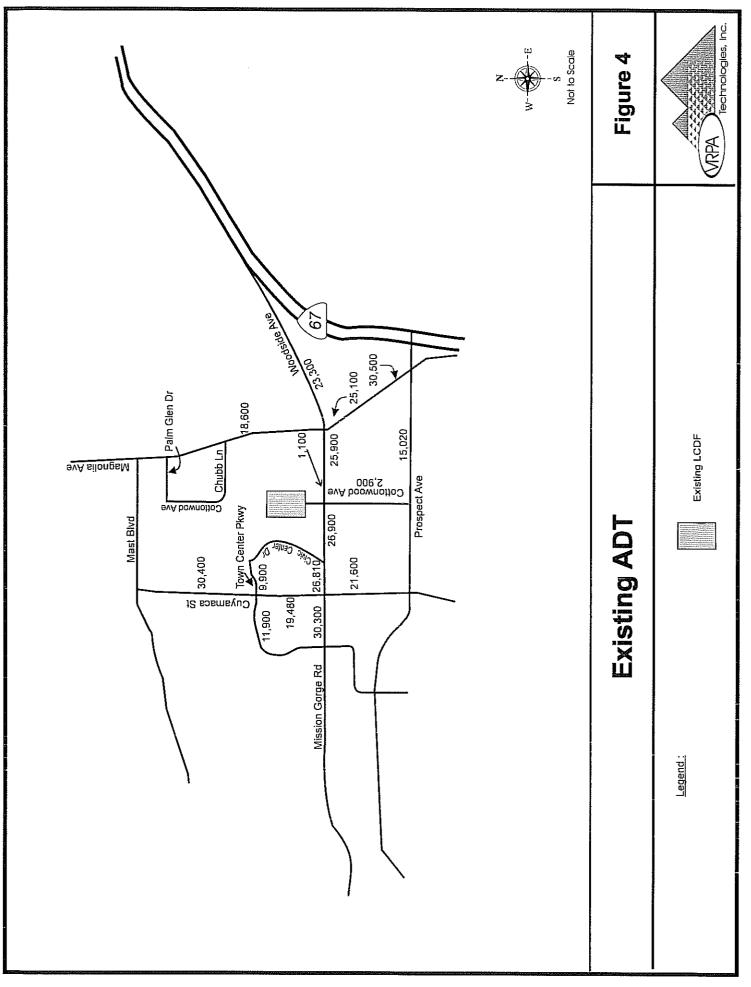
Woodside Avenue is classified as a major arterial and is presently a four lane roadway between Magnolia Avenue and State Route 67.

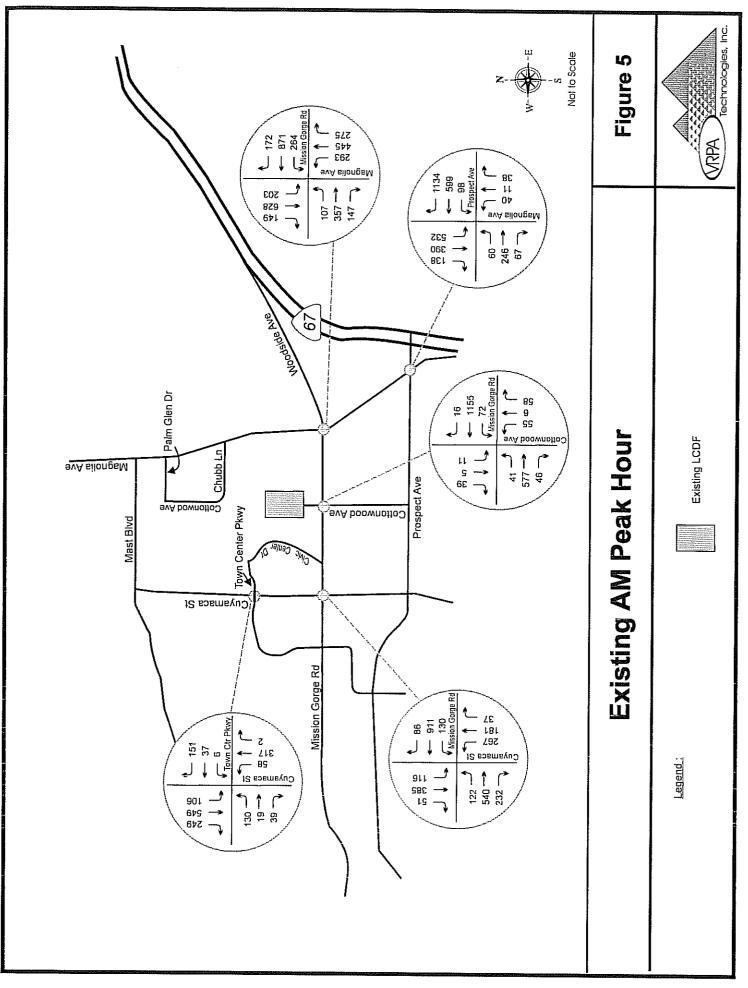
Table 5 shows the future horizon year classification characteristics for the study area roadway segments based on the information available in the City of Santee Circulation Element (2020). Appendix B provides information about the City of Santee Circulation Element (2020).

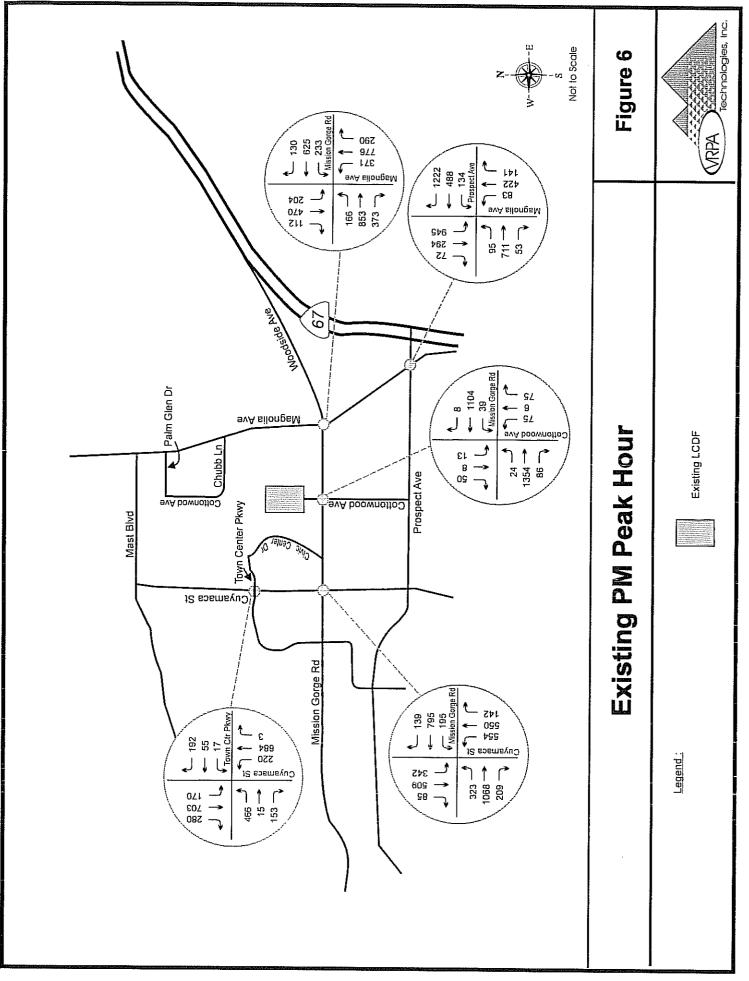












3.0 PROJECT IMPACT ANALYSIS

3.1 ANALYSIS METHODOLOGY

This traffic impact analysis was conducted using guidelines for traffic impact analysis prepared by the County .(County Of San Diego, Report Format and Content Requirements for Transportation and Traffic, September 26, 2006 and revised effective December 5, 2007). This guideline was selected because the County of San Diego is the lead agency under the California Environmental Quality Act (CEQA).

In traffic engineering methodology, roadway operations are described in terms of level of service (LOS), ranging from LOS A (light traffic, minimal delays) to LOS F (significant traffic congestion). LOS D was used as the standard for evaluation of roadway operations in the study area. Therefore, roadways operating at LOS A through LOS D were considered to be operating adequately with no need for improvement. Improvements were recommended for roadways expected to operate at level of service LOS E or LOS F.

3.1.1 SUMMARY OF SIGNIFICANCE CRITERIA

The County of San Diego guidelines for the determination of significance of impacts for roadway segments and intersections states that a significant traffic impact occurs when:

- ♦ The project was expected to cause a roadway segment to fall below LOS D operating conditions.
- ♦ The project added a significant amount of traffic to a roadway segment expected to operate at LOS E or F.
- ♦ The project was expected to cause an intersection to fall below LOS D operating conditions.
- ♦ The additional traffic generated by the proposed project will significantly increase congestion at an intersection currently operating at LOS E or F.

The significance criteria stated above is to be applied to determine direct impacts as well as for determining cumulative impacts. For cumulative impacts, the guidelines state that by adding the proposed project trips to all other trips from a list of projects, the significance criteria stated above must be used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts. Appendix C provides information about the County of San Diego significance criteria.

3-1

3.2 PROJECT TRIP GENERATION

To assess the impacts that the project may have on the surrounding streets, the first step was to determine the project trip generation. The following information describes the operating characteristics of the new proposed expanded detention facility.

The trip generation rate available in the ITE trip generation handbook for a detention facility type land-use was considered inadequate as the ITE Handbook provides trip generation information based on a very small and limited sample size data and there is no fitted curve equation available in the ITE trip generation handbook for detention type land-use. It was decided to collect the actual ADT counts from the field for existing detention facility and compare it with the ITE trip generation handbook rates to validate the trips rates available in the ITE Handbook. After comparing the trip rates, it was considered appropriate to determine the trip generation rate for the proposed project on the basis of the actual ADT counts collected from the field because the trip rates calculated from the actual counts were higher than the trip rates available in the ITE Handbook. The higher trip rates calculated from the actual trips would comply with the CEQA requirement that project impacts should be assessed by studying the worse case conditions. The counts were taken from a section of Cottonwood Avenue beyond the fire station that is only accessed by the trips entering and exiting the existing detention facility. The ADT counts were conducted for three days from Thursday - Saturday, on February 28, February 29 and March 1, 2008. The ADT count information collected for Thursday was selected as it was the most representative day to calculate the trip rate as the overall traffic in the study area would be higher on Thursday being a weekday as compared to the weekend and would be more suitable to study the project's impacts on study area intersections. Peak hour counts in the AM and PM were also conducted at the intersection of Mission Gorge Road / Cottonwood Avenue on Thursday, February 28, 2008. The ADT count data and the intersection count data is provided in the Appendix A for reference.

The trip rates calculated from the data collected is shown below:

Total ADT from the counts = 1275

AM peak hour trips = 65 (Peak hour between 7:15am - 8:15 am) PM peak hour trips = 84 (Peak hour between 5:00pm - 6:00pm)

AM peak percentage = 65 / 1275 = 5.1% PM peak percentage = 84 / 1275 = 6.6 %

AM percentage inbound = AM inbound trips / Total AM trips = 36 / 65 = 55 % PM percentage inbound = PM inbound trips / Total PM trips = 45 / 84 = 54 %



Existing number of beds assumed = 600 beds. It should be noted that the existing Las Colinas facility typically has a bed count ranging from 600-800. The assumption of 600 beds is a conservative estimate as it results in a larger increase of beds resulting from the proposed project. Assuming 600 beds ensures that the increase of 616 beds (1,216-600) is a worst case scenario and complies with the CEQA requirement that the project impacts should be assessed by studying worst case conditions.

Daily trip rate = 1275 / 600 = 2.13 trips per bed AM trip rate = 65 / 600 = 0.11 trips per bed PM trip rate = 84 / 600 = 0.14 trips per bed

The difference between the existing beds (600 beds) and the proposed future beds (1216 beds) is 616 beds. Applying the trip rates calculated above to the increment of 616 beds gives us the trip generated by the proposed facility expansion. The resulting trip generation is shown in Table 3. Daily project traffic is shown in Figure 8. The AM and PM traffic generated by the project is shown in Figures 9 and 10. Although the project is to be developed in 2 phases, the TIA assumes the project to be completed in a single phase as the trips generated by dividing the project into separate phases are small and can be considered insignificant when compared to the trips generated if the project is considered developed in a single phase. For comparison purposes, Table 4 shows the expected trip generation if the project was not built and the project site was developed with business park land use as envisioned in the City's Town Center Specific Plan Amendment.

				TABLE 3 : PROJECT TRIP GENERATION	ROJECT TI	RIP GENE	RATION					
Land Use	Size	Units	Daily Trip	Daily Trine	% AM	%PM	% AM	₩d%	AM Peal	AM Peak Hour Trips	PM Pe	PM Peak Hour Trips
			Generation	adir. funa	Peak	Peak	punoqui punoqui	punoqu	2	OUT	2	OUT
Detention Facility 616**	616**	peds	2.13	1312	5.1%	%9'9	25%	54%	37	30	47	40
									Total AN	Total AM Peak = 67 Total PM Peak =87	Total PM	Peak =87

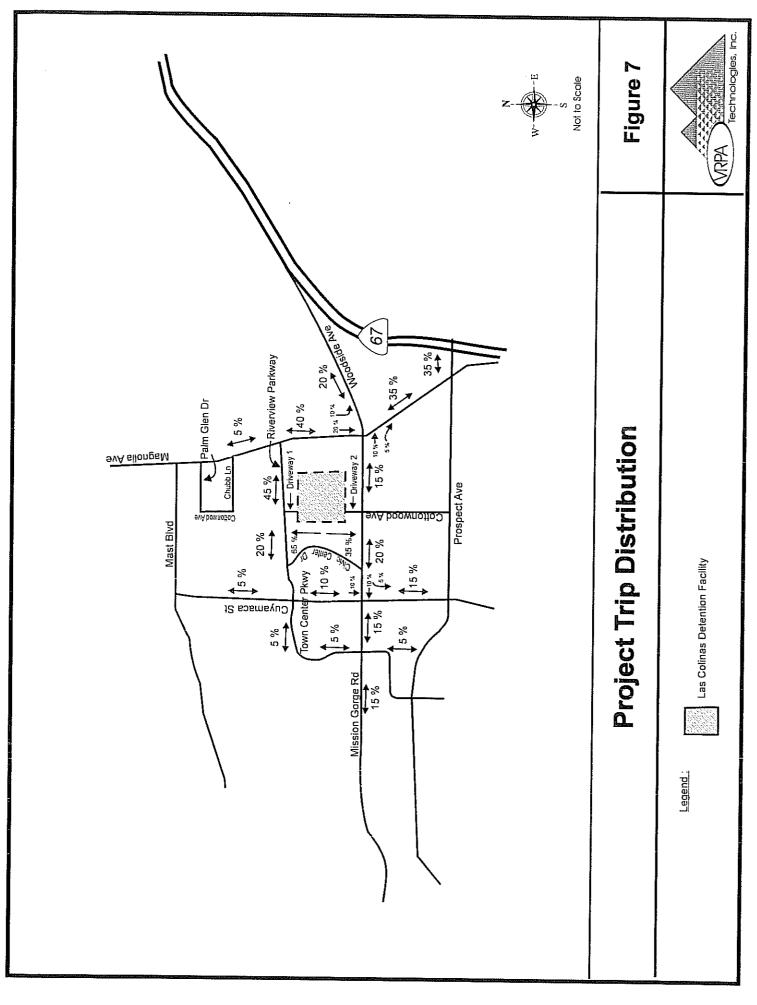
** Represents the propsed increase in the number of beds from 600 to 1,216

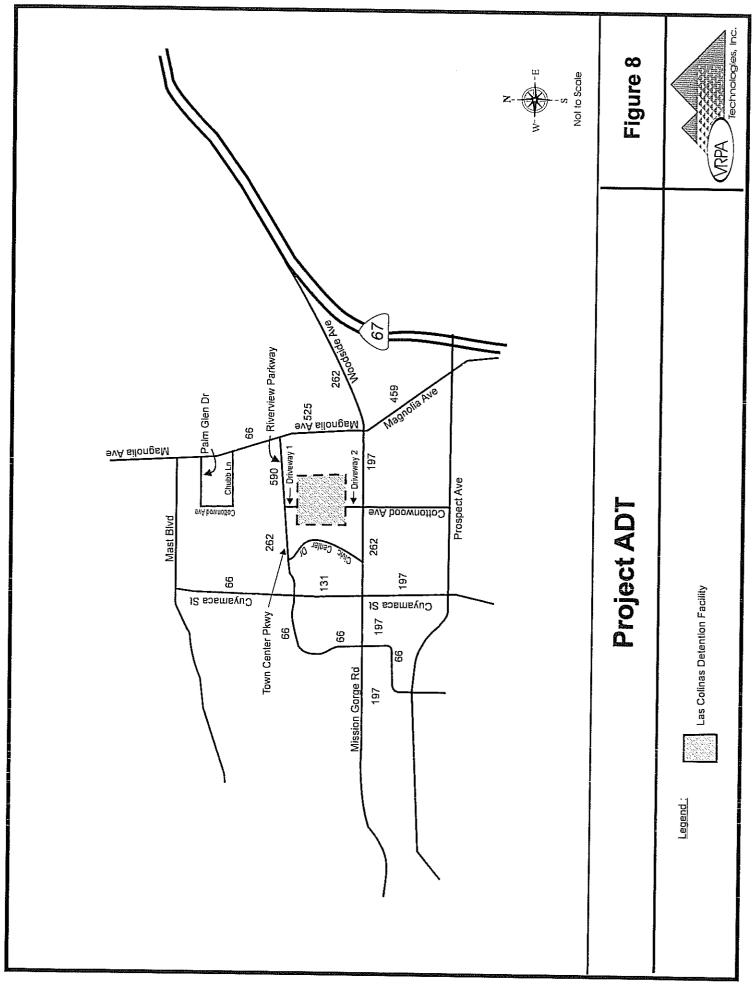
3.3 PROJECT TRIP DISTRIBUTION

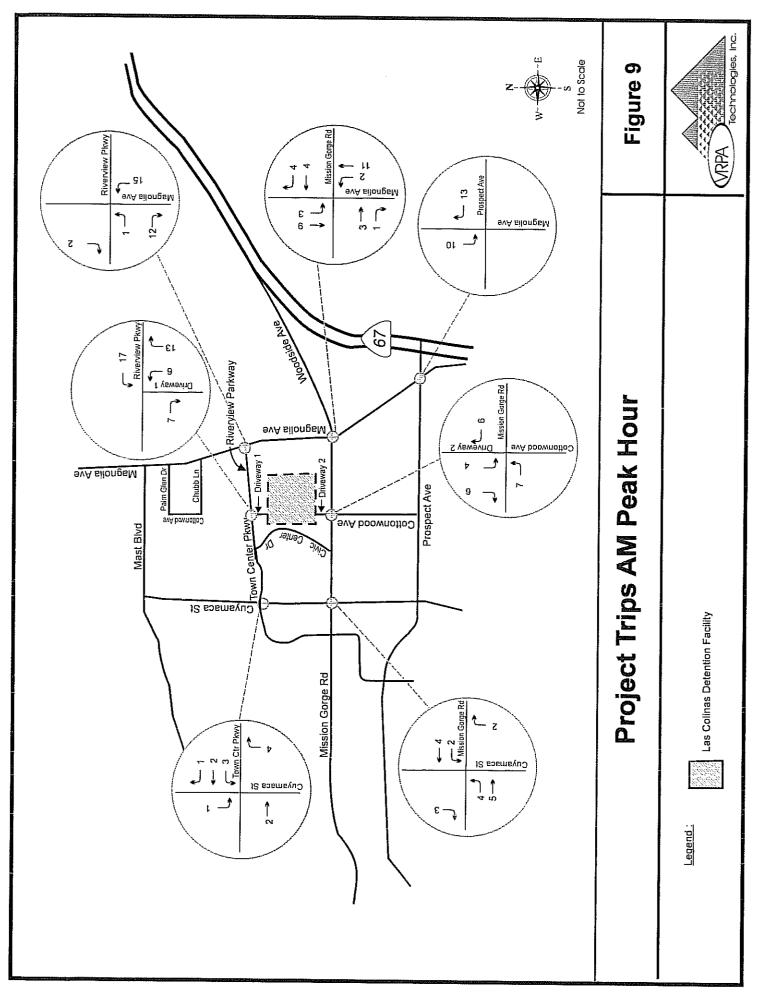
Project traffic as calculated in Table 3 was distributed to the roadway system using the trip distribution percentages shown in Figure 7. This information was based on prevailing traffic patterns in the area of the project site. The primary visitor access of the proposed detention facility is provided from the north. The primary visitor access driveway leads into the detention facility from the future proposed Riverview Parkway. Cottonwood Avenue to the south of the proposed detention facility would become the secondary driveway providing access for the staff, service and emergency services. Figure 27 shows the lane geometry for the two access driveways.

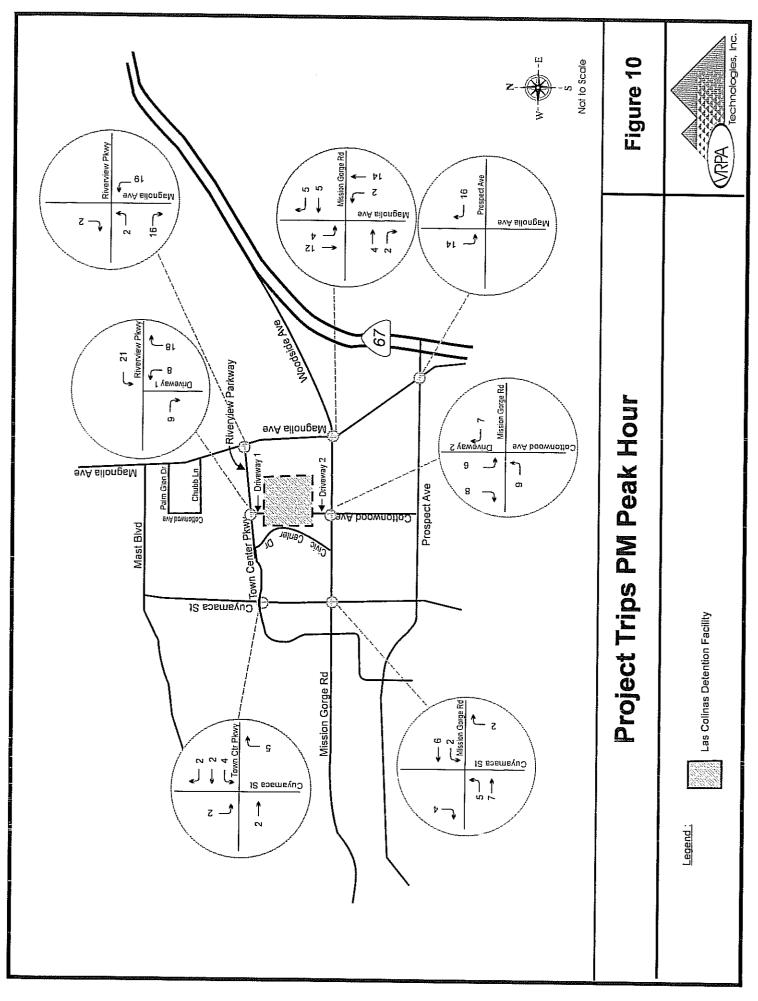
3.4 EXISTING PLUS PROJECT CONDITIONS

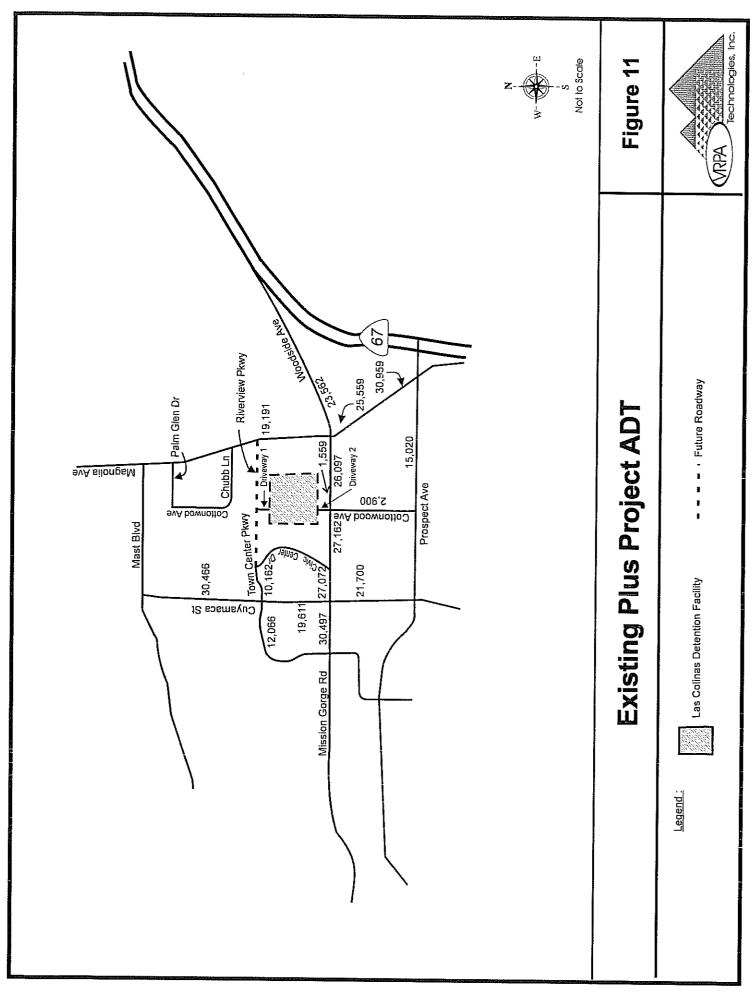
The existing plus project conditions analyze the direct impacts of the proposed project at the existing study area intersections. The project trips calculated from the project trip generation were added to the existing traffic conditions to determine the traffic volumes for the existing plus project conditions. Figure 11 shows the average daily traffic volumes for the existing plus project conditions. Figures 12 and 13 show the AM and PM peak hour volumes for the existing plus project conditions. The existing plus project scenario does not cause any direct impacts to the roadway segments or intersections in the study area. Table 6A shows the capacity analysis for the roadway segments in the existing plus project conditions. Table 7A shows the capacity analysis results for the intersections in the existing plus project conditions.

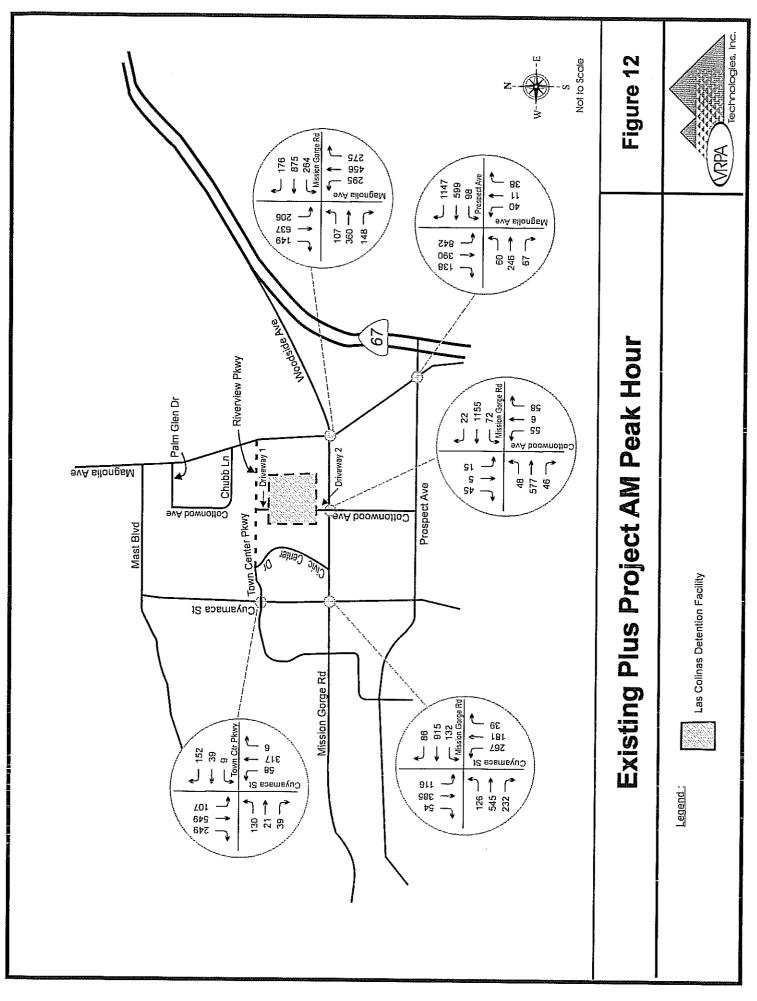


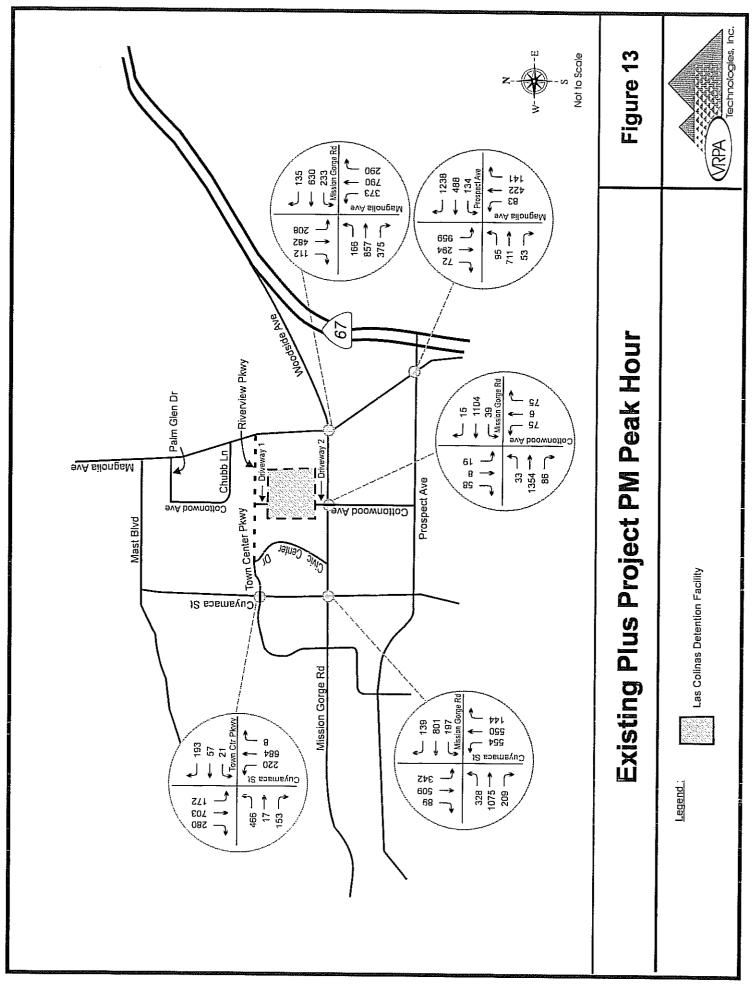












3.5 EXISTING PLUS CUMULATIVE CONDITIONS

The existing plus cumulative conditions analyze the existing traffic and cumulative traffic generated by adjacent development projects on the existing study area intersections. VRPA was provided with a list of cumulative projects to be used to analyze the existing plus cumulative conditions. The list of projects along with their location considered for the cumulative analysis is provided below.

CITY OF SANTEE PROJECTS:

- Walgreens # 1 (14,820 square feet), Mission Gorge Road between 1st Avenue and Magnolia Avenue.
- Market Place at Santee (71,350 square feet retail center), Mission Gorge Road, east of Carlton Hills Boulevard near Hazeldon between Cuyamaca Street and Magnolia Avenue.
- Walgreen's # 2 (12,729 square feet), 9305 Mission Gorge Road between Hazeldon and Justa Lane.
- San Diego River Restoration (140 acre riparian habitat enhancement project), San Diego River bound by Cuyamaca Street, N. Magnolia Ave Avenue and along the southern boundary of the 100-year floodplain of the river.
- Villages at Fanita (1,380 dwelling units on 2,600 acre), North of Fanita Parkway Terminus.
- Riverwalk Subdivision (218 Multifamily units), Hoffman Lane, East of Cuyamaca Street and South of Mast Boulevard.
- Sky Ranch Development (224 single family dwelling units, 149 multi-family dwelling units, common area and open space on 377.5 acres) north terminus of Graves Avenue, east of State Route 67.
- Express Performance Center (25,101 square feet industrial), North Magnolia Avenue near Sharlene Lane.
- Riverview Office Park (63,504 square feet), North of Town Center Parkway and Civic Center Drive, east of Cuyamaca Street.
- Marrokal Office Building (32,927 square feet industrial building), Mission Gorge Road between Marrokal Lane and State Street.
- Lunar Lane Industrial Building (two five-story square feet industrial building totaling 38,961 square feet), Mission Gorge Road between Marrokal Lane and State Street.
- Hollywood Theater (1952 seating capacity theater totaling 38,555 square feet),
 North of Town Center Parkway, East of Cuyamaca Street and West Riverview Parkway
- Riverview Residential (238 condominium and 8 live/ work spaces on 11.26 acres),
- Town Center Parkway, East of Cuyamaca Street and West of Cottonwood Avenue. This project is already built.



- Cuyamaca Town Commons (38,532 square feet office building on 3.27 acres), Cuyamaca Street near Hoffman Drive, South of Mast Road and North of Mission Creek Drive. This project is already built.
- Morningside (138 condominium units), Cottonwood Avenue, South of Mission Gorge Road and North of Buena Vista Avenue. This project is already built.
- Santee Town Center Specific Plan Amendment (154 acre development within the City of Santee Town Center Specific Plan Area that includes residential, commercial, mixed use and community service uses), North of Mission Gorge Road, South of San Diego River, East of Cuyamaca Street and West of Magnolia Avenue.
- Treviso Subdivision (186 unit residential condominium), Mission Gorge Road and West Hills Parkway.
- Magnolia Town homes (10 residential units), 8943 Magnolia Avenue
- Tamberly Associates (8700 square feet), 10050-55 Mission Gorge Road
- North Island Financial Credit (7950 square feet), 30 Town Center Parkway
- Ladera Tentative Map (46 residential units), east of the 11500 block of Woodside Avenue.
- Liberty Charter School (129,000 square feet / 400 students), 210 Civic Center Dr, Rivewalk Center, Santee, CA 92071
- Altair/Lyons Homes (85 multi family condominium), 10887 Woodside Avenue.
- Windmill Construction Company (25 condominium units), Southeast corner of Buena Vista Avenue and Mission Greens.
- Mission Creek Commons (18,359 square feet), 9466 Cuyamaca Street.
- Las Brisas/Pacific Homes (28 residential condominiums), 8834 Cottonwood Avenue.
- Rancho Pacific Investments (6 condominiums), 8772 Cuyamaca Street
- Castle Dental Services (3000 square feet), 246 Town Center Parkway
- Hofstee Storage Building (1000 square feet), 10358 Buena Vista Avenue
- American Sheet Metal (11,619 square feet industrial), 9472 Railroad Avenue
- Sampson/Sky investment (14,954 square feet industrial), 8779 Cottonwood Avenue, northeast corner with Buena Vista
- Town Center Park Phase 2 (55 acres community park), Town Center Specific Plan, north of San Diego River
- Tower Glass Industrial Building (35,000 square feet industrial plus 6,000 square feet outdoor storage), 9702 Prospect Avenue

COUNTY OF SAN DIEGO PROJECTS:

- Lakeside Downs (149 residential units), Lakeside.
- Edgemoor Facility Demolition Project (Demolition of existing Edgemoor Geriatric Hospital), along Magnolia Avenue.
- Edgemoor Skilled Nursing Facility (150,000-square foot, 192-bed facility on 13 acres of a 30-acre parcel of land), south of Mast Boulevard, north of San Diego River, bordered on east by Cottonwood Road.

The traffic generated by the developments listed above as well as a general increase in traffic was estimated using a growth factor of 2.5 % per year. The growth factor was determined based on a comparison of the existing ADT volumes along major streets within the study area with the future ADT volumes. Based on this comparison, it was determined that the growth factor varies between 2 – 3% growth per year. Therefore, an annual average growth factor of 2.5 % was applied to the existing traffic volumes to get the existing plus cumulative traffic volumes. Figures 14, 15 and 16 show the traffic volumes for the existing plus cumulative conditions. The traffic increase due to the cumulative projects on the existing conditions does not cause any significant impacts to the study area roadway segments. Table 6A shows the capacity analysis for the roadway segments in the existing plus cumulative conditions. Under the existing plus cumulative project conditions, there is a cumulative impact at the intersection of Prospect Avenue / Magnolia Avenue and Mission Gorge Road / Cuyamaca Street. Table 7A shows the capacity analysis results for the intersections in the existing plus cumulative conditions.

3.6 (OPENING DAY) CONDITIONS

The traffic generated by the project was added to the traffic generated by the existing plus cumulative conditions to get the opening day traffic conditions. Figures 18, 19 and 20 show the traffic volumes for the opening day conditions. An application for a Conditional Use Permit has been filed with the City of Santee for the proposed Liberty Charter School to be located on the north side of future Riverview Parkway approximately 500 feet west of Magnolia Avenue. Access for the proposed school is to be provided by construction a two lane portion of Riverview Parkway approximately 1000 feet ending approximately 250 feet east of the proposed location for the LCDF project. It is anticipated that the Liberty Charter School project would be completed in 2009 which would be well before the completion of the Phase I construction of the LCDF in 2013. Therefore, most of the Riverview Parkway needed for access to LCDF Phase I would be in place before Phase I is constructed and the County would need to construct the remaining 250 feet to the proposed entrance. If the portion of Riverview Parkway need for the Liberty Charter School is not built when the County completes Phase I of the LCDF project, the County would construct the portion of the road to two lanes from Magnolia Avenue to the access of the new facility. Figure 17 shows the opening day lane geometry conditions. The intersection of the future proposed Riverview Parkway with the project access driveway is assumed as a three legged stop controlled intersection. All the roadway segments in the study area operate at LOS D or better in the opening day conditions. The proposed Las Colinas Detention Facility does not cause any cumulative impacts to the roadway segments in the study area. Table 6A shows the capacity analysis for the roadway segments in the opening day conditions. The intersections of Mission Gorge Road / Cuyamaca Street and Prospect Avenue / Magnolia Avenue operate below LOS D in the existing plus cumulative conditions. On opening day, the project adds trips to these intersections that operate below LOS D; therefore Las Colinas Detention Facility becomes a part of the cumulative impacts at these intersections. Thus it can be concluded that the project causes cumulative significant impacts to the intersections of Mission Gorge Road / Cuyamaca Street and Prospect Avenue / Magnolia Avenue in the opening day conditions. Table 7A shows the capacity analysis results for the intersections in the opening day conditions.

3.7 HORIZON YEAR (FUTURE NO PROJECT CONDITIONS 2030)

The transportation model for the 2030 conditions was run by SANDAG at the request of VRPA Technologies. A sub area model created specifically for the City of Santee was used as the base for the new model run. The sub area model used as base model includes the extension of SR 52 from SR 125 to SR 67. The sub area model was used in the development of the Circulation Element provided in the City of Santee's General Plan. A new model run was prepared to reflect future 2030 conditions assuming that the proposed Las Colinas Facility expansion does not occur and that the existing Las Colinas Facility continues to operate at its present location. Since the existing Las Colinas facility was assumed to continue operating at its present location, the extension of Cottonwood Avenue was deleted between Mission Gorge Road and the proposed Riverview Parkway as this



extension passes through County owned land and the County of San Diego has stated that it would not agree to the extension of Cottonwood Avenue through its land. While the City of Santee could extend roadway through private land through eminent domain proceedings, this would not apply to County owned land since the County is a higher level agency than the City. Since the extension of Cottonwood Avenue from Mission Gorge Road to the future proposed Riverview Parkway was not assumed to occur, the northern extension of Cottonwood Avenue from the proposed Riverview Parkway to Mast Boulevard was also assumed to not occur since the northern extension of Cottonwood Avenue was not considered logical if no connection to Mission Gorge Road could be made.

The Circulation Element provided in the City of Santee's General Plan was used to determine the future lane geometry for the roadways and intersections in the study area. Table 5 shows the roadway classification based on the information provided by the City of Santee Circulation Element. The expected future lane geometry is shown in Figure 21. Traffic volumes for future no project (2030) conditions are shown in Figures 22, 23 and 24. An alternative No Project scenario considers the existing LCDF facility to be removed completely. In this alternative scenario, the existing LCDF land and surrounding land would be redeveloped to business park use, per the City of Santee Town Center Specific Plan Amendment (2006). SANDAG trip generation rates (Brief guide of Vehicular Traffic Generation Rates for the San Diego Region, SANDAG, April 2002) for land use category "Business Park" were used to determine the trips for the "alternative" scenario.

Appendix D provides the SANDAG reference chart. Table 4 shows the trips generated if this alternative scenario is considered. The trips generated under this alternative scenario are much higher than the trips generated by the proposed project.

INTERSECTIONS

Under future no project (2030) conditions the following intersections are expected to operate below LOS D due to cumulative developments and growth:

- 1. Mission Gorge Road and Cuyamaca Street
- 2. Mission Gorge Road and Magnolia Avenue
- 3. Prospect Avenue and Magnolia Avenue

ROAD SEGMENTS

Under future no project (2030) conditions, the following street segment is expected to operate at LOS E due to cumulative developments and growth:

1. Magnolia Avenue between Mission Gorge Road and Riverview Parkway

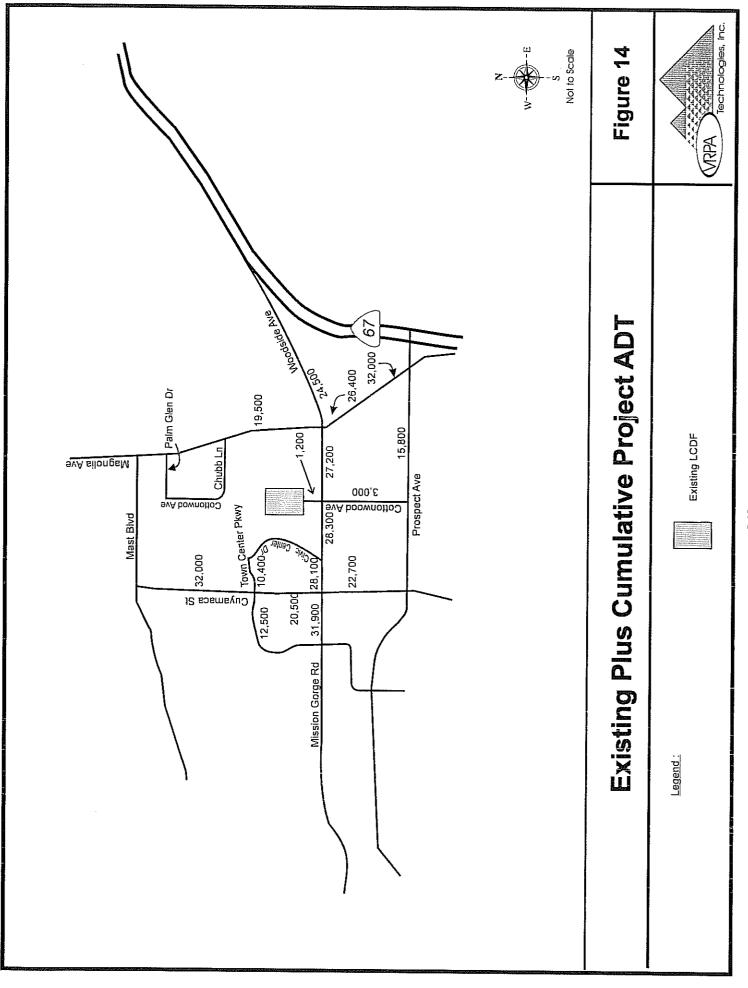
Tables 6A and 7A show the capacity analysis results for the roadway segments and intersections for the future no project (2030) conditions.

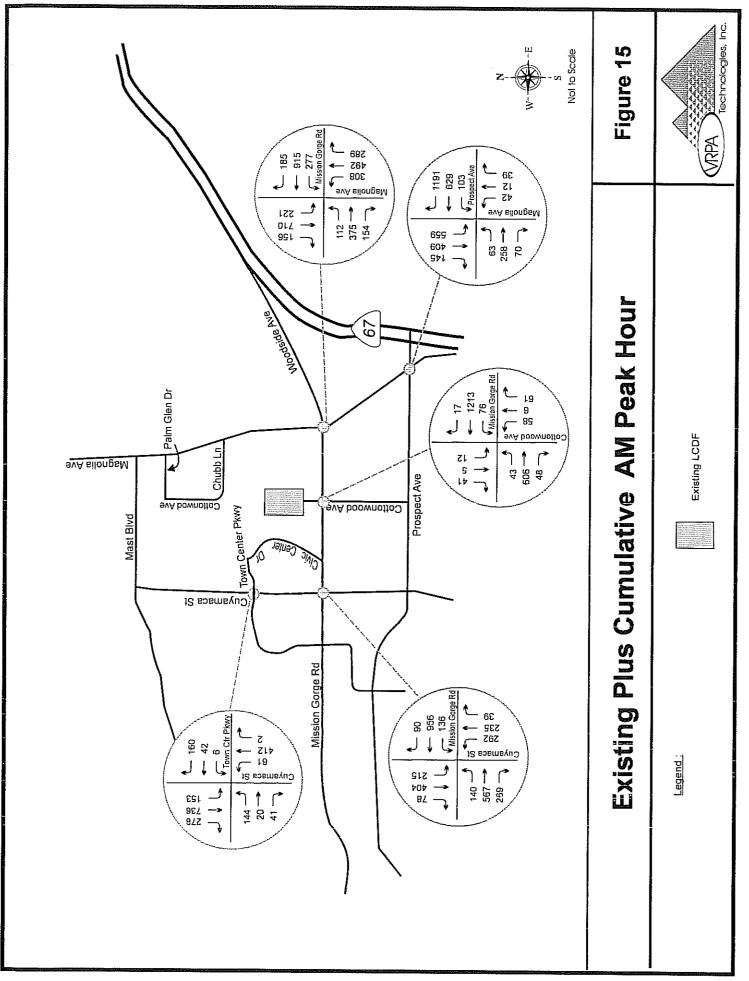


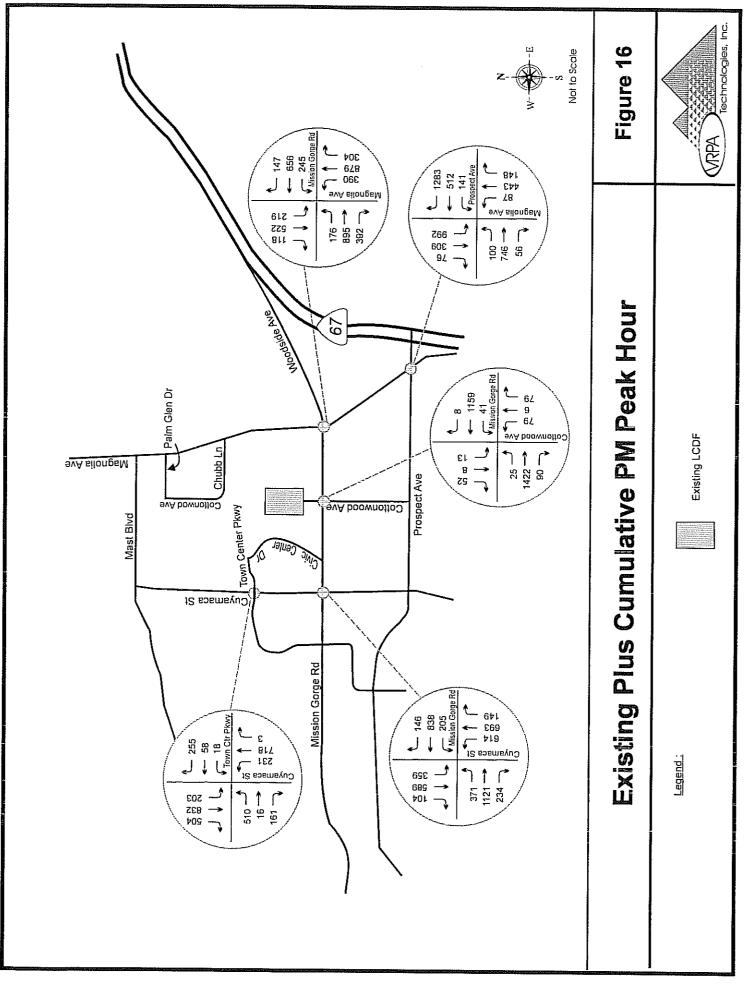
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	PM Peak	2		360
	AM Peak Hour Trips PM Peak Hour Trips	OUT		216
USE	AM Peak	N		504
IVE LAND	% PM	Inbound		40%
LTERNAT	% AM	Inbound		%02
ON FOR A	₩d%	Peak		10.0%
ENERATIC	% AM	Peak		8%
PROJECT TRIP GENERATION FOR ALTERNATIVE LAND USE	Daily Trins			0006
TABLE 4: PF	Daily Trip	Generation		200/acre
	(Inits			acres
	Size			45
	Land Use			Business Park

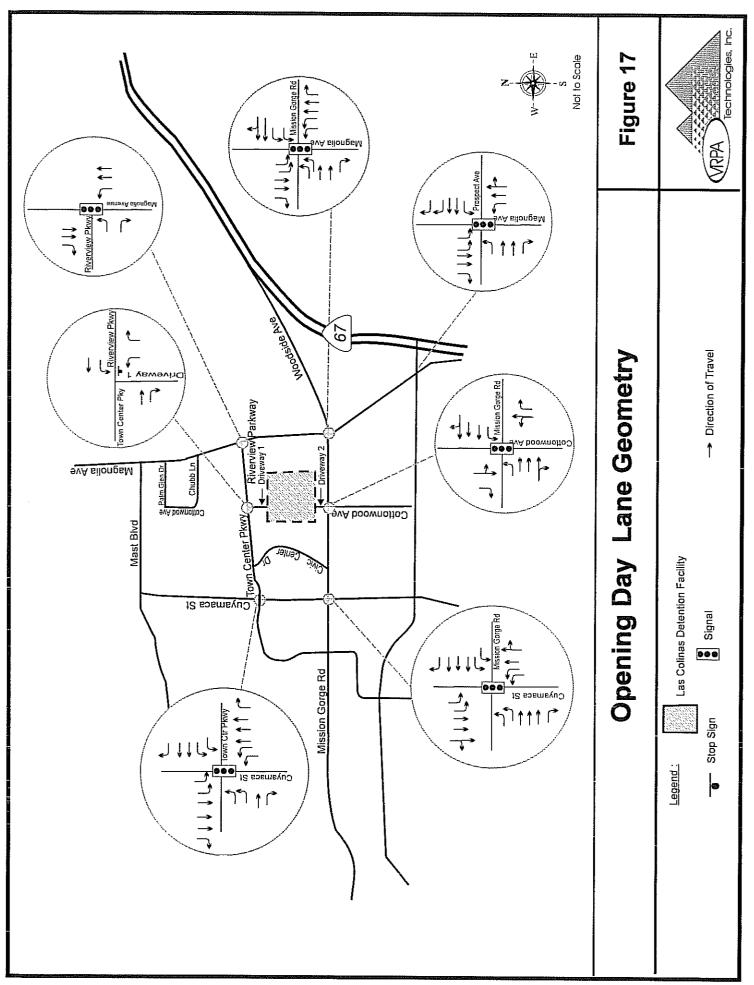
Total PM = 900

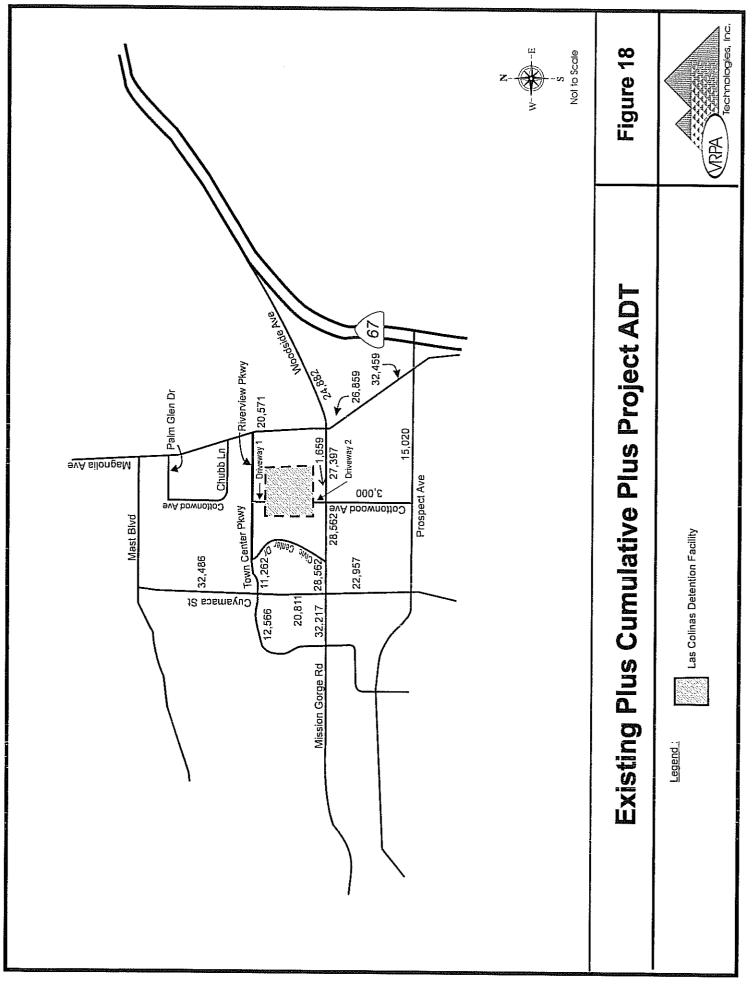
Total AM = 720

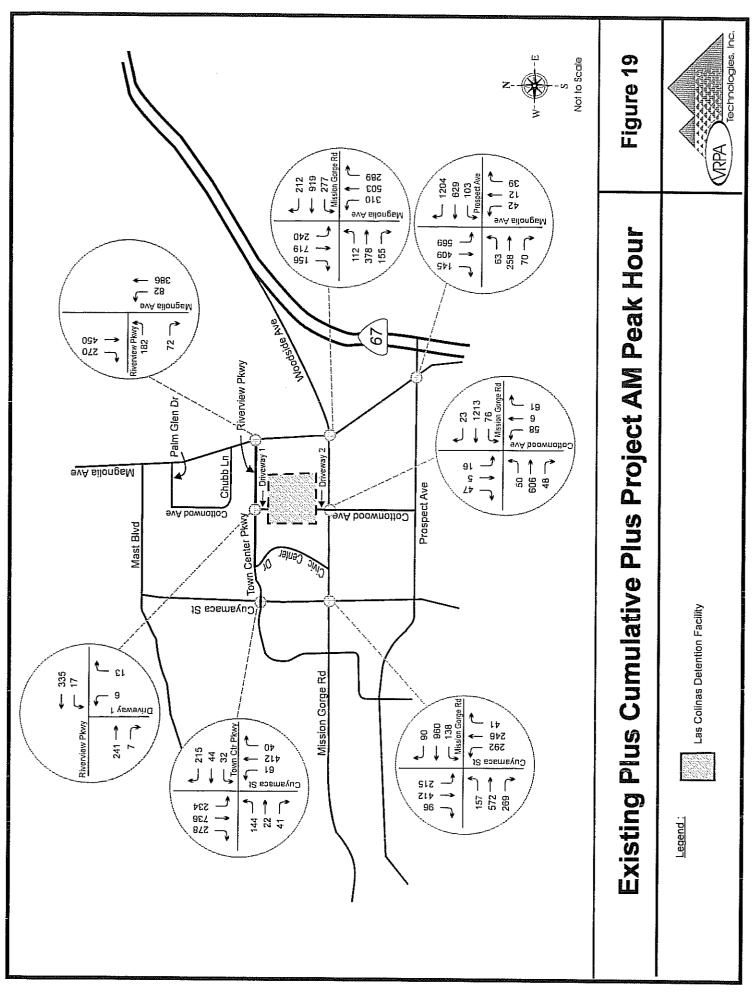


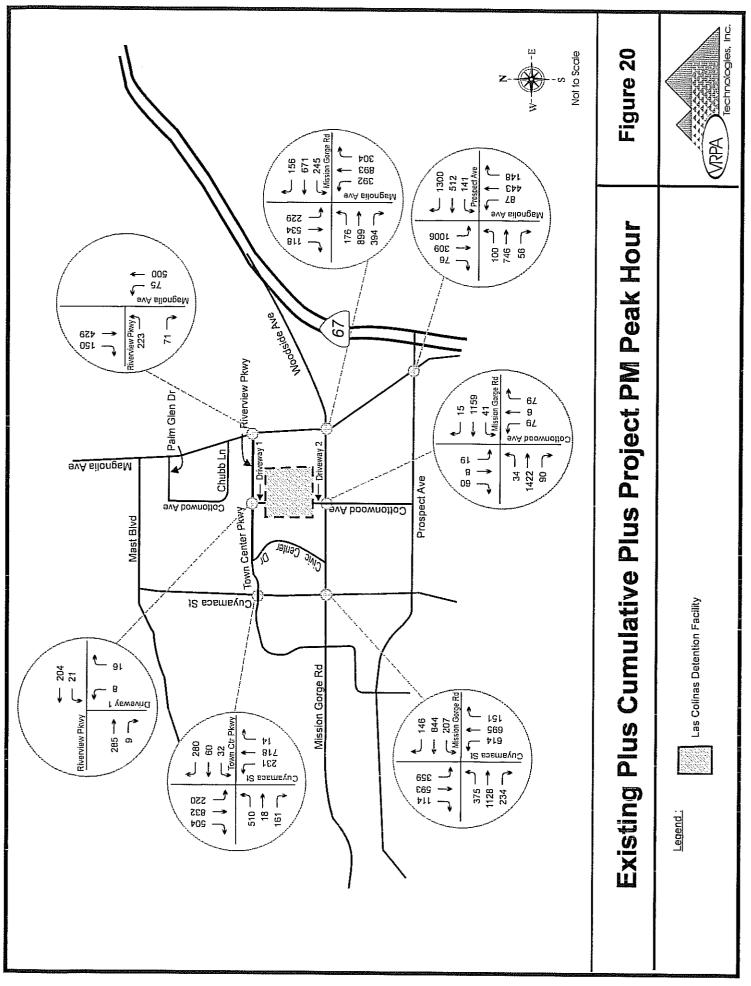












3.8 HORIZON YEAR PLUS PROPOSED PROJECT CONDITIONS (FUTURE WITH PROJECT CONDITIONS 2030)

The traffic generated by the project was added to the future no project conditions to get the future with project traffic conditions. The Circulation Element of the City of Santee's General Plan was used to determine the future lane geometry for the roadways and intersections in the study area.

Table 5 shows the roadway characteristics based on the information provided in the City of Santee Circulation Element. The expected future lane geometry is shown in Figure 21. The traffic volumes for future with project (2030) conditions are shown in Figures 25, 26 and 27.

INTERSECTIONS

Under future with project (2030) conditions, the following intersections are expected to operate below LOS D:

- Mission Gorge Road and Cuyamaca Street
- 2. Mission Gorge Road and Magnolia Avenue
- 3. Prospect Avenue and Magnolia Avenue

Since the proposed Las Colinas facility adds trips to the intersections already operating below LOS D, it can be concluded that the project causes cumulative significant impacts to the three intersections stated above in the future with project (2030) conditions.

ROAD SEGMENTS

Under future with project (2030) conditions, the following street segment is expected to operate at LOS E:

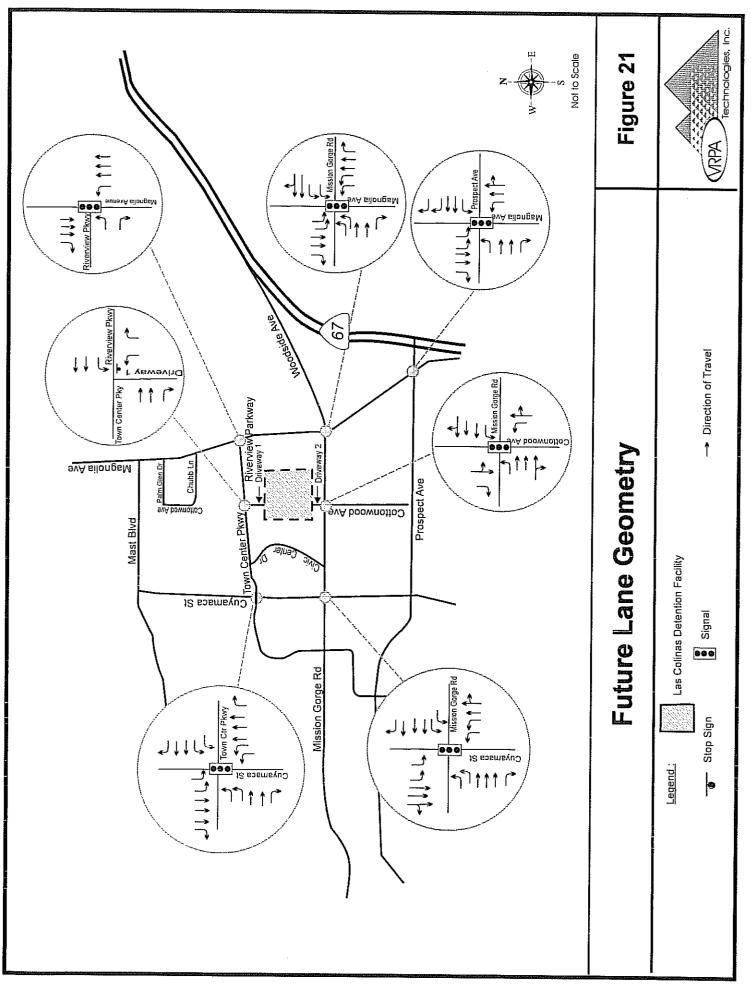
1. Magnolia Avenue between Mission Gorge Road and Riverview Parkway

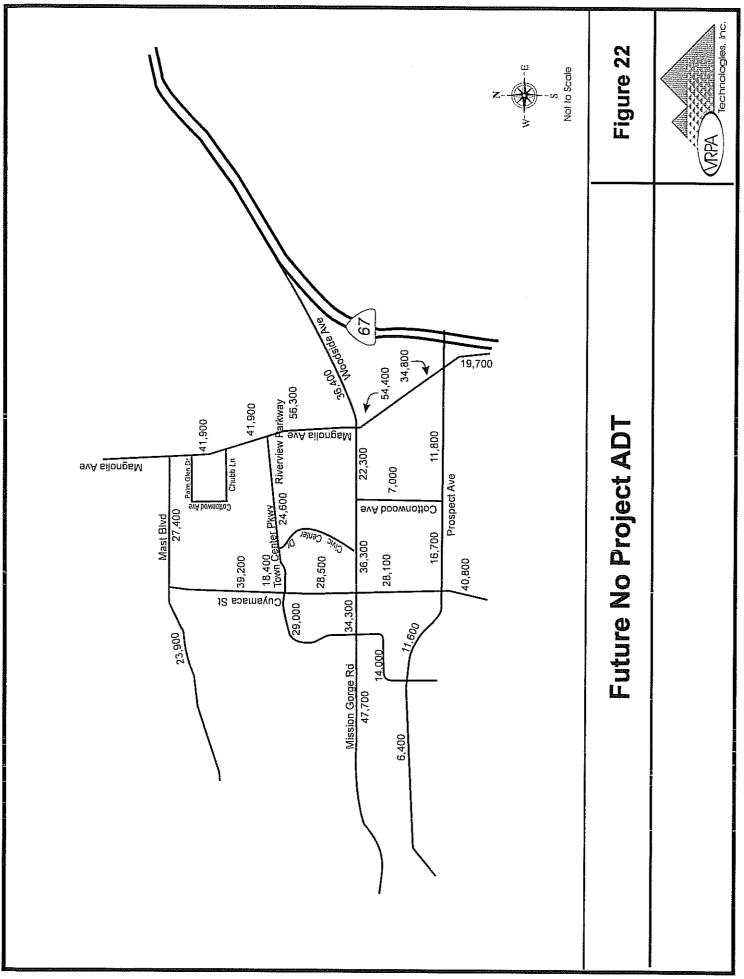
Since the proposed Las Colinas facility adds trips to the segment already operating at LOS E, it can be concluded that the project causes cumulative significant impacts to the segment stated above. Tables 6A and 7A show the capacity analysis results for the roadway segments and intersections for future with project (2030) conditions.

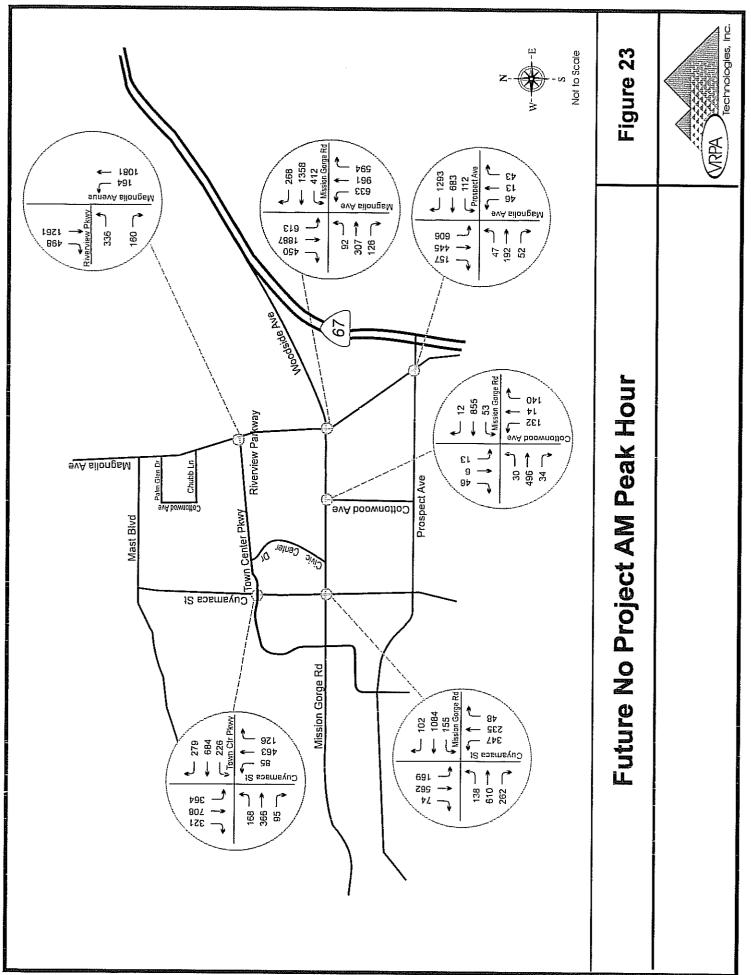
As per the County guidelines, if the total cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.

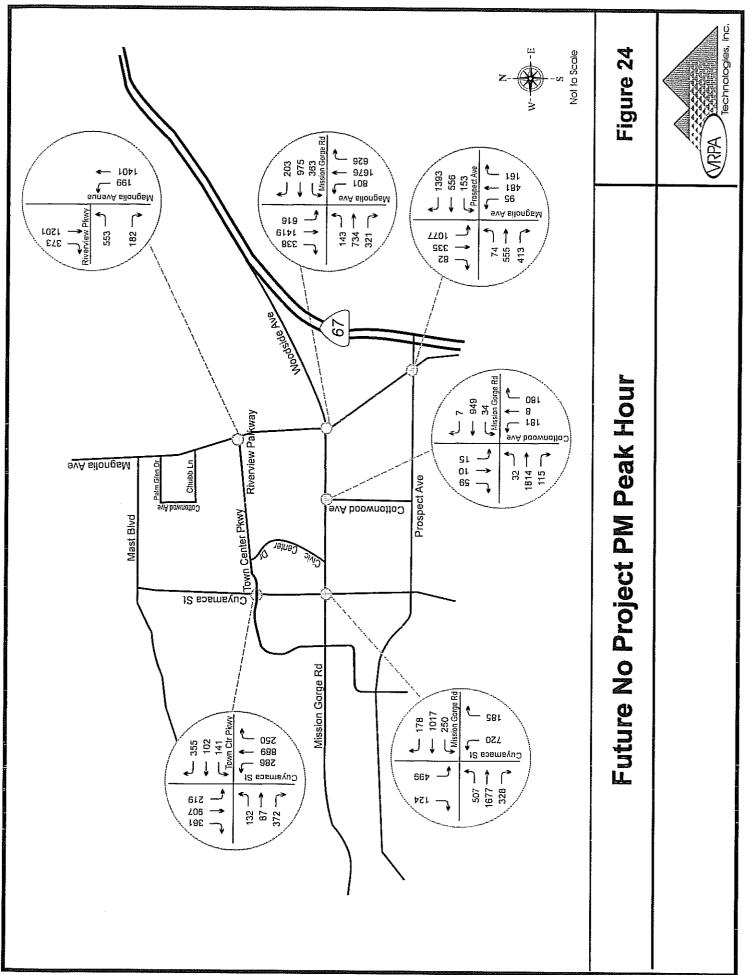
Chapter 4 provides information on the mitigation measures needed to improve the impacted segments and intersections.

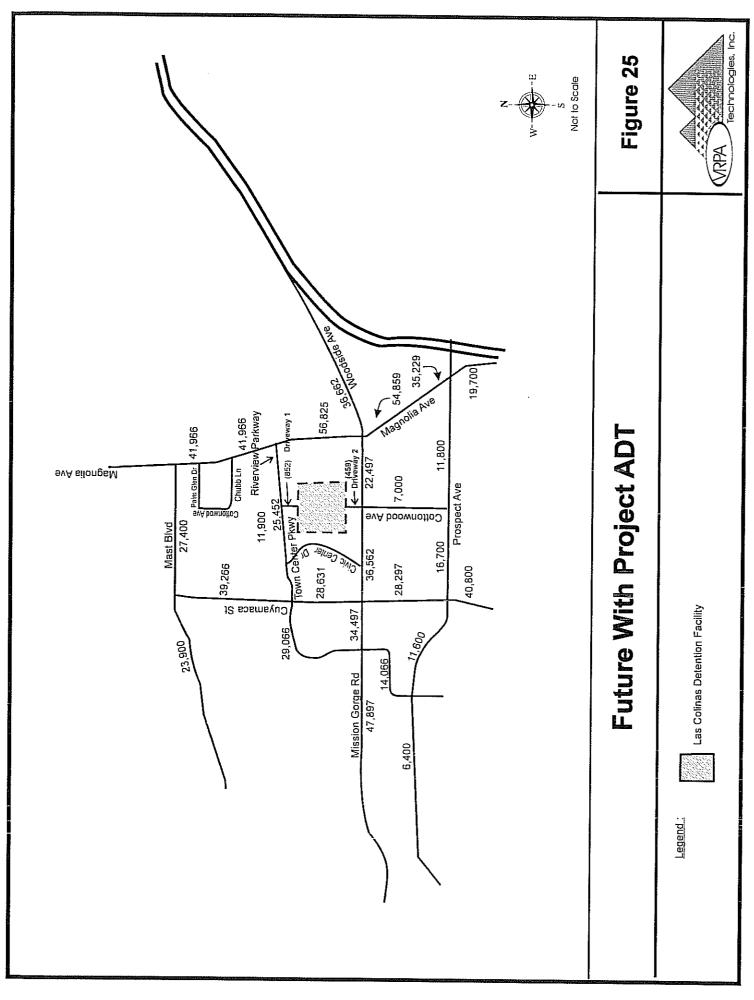


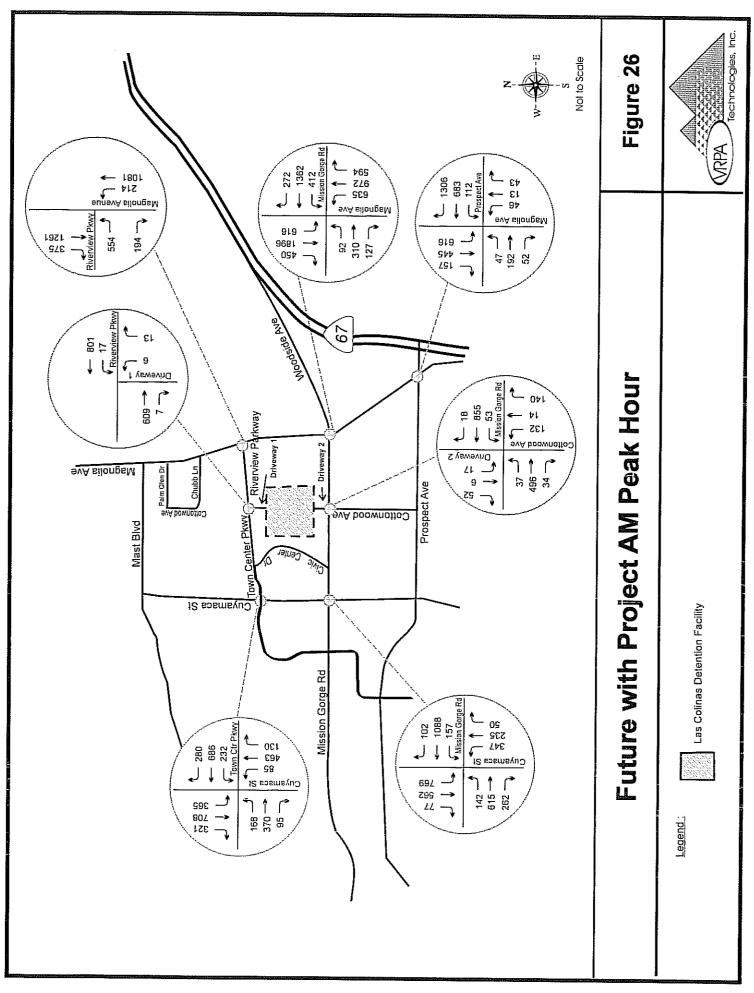


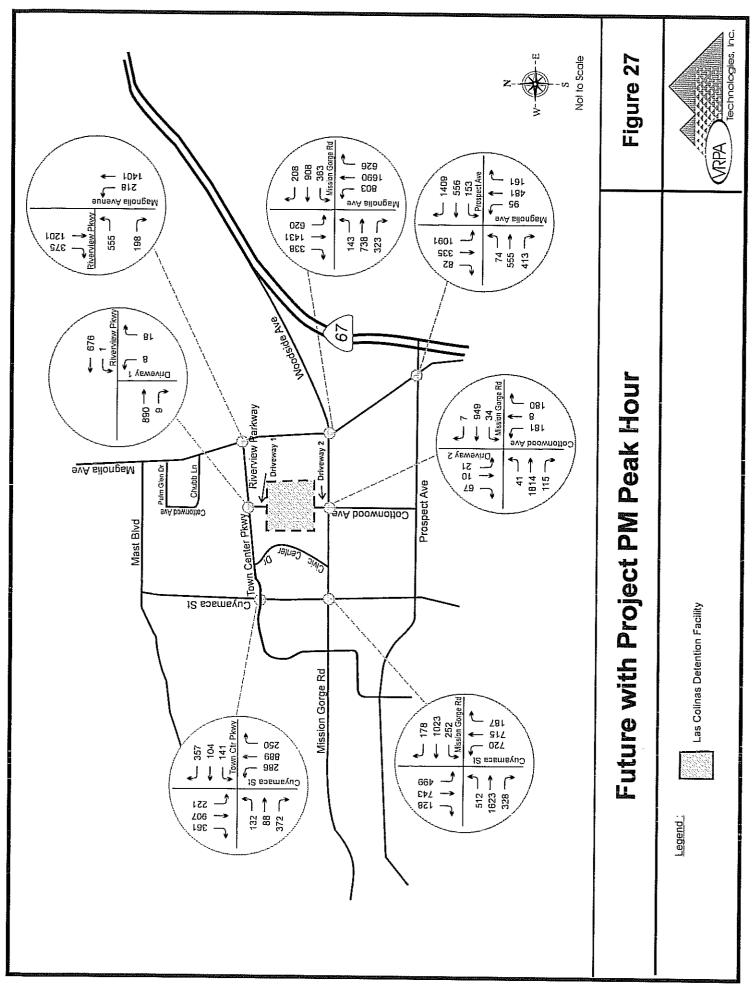












3.9 INTERSECTION SIGHT DISTANCE

A field review of all study area intersections indicates that there are no existing sight distance problems. It is expected that sight distance will be maintained by the City of Santee to urban standards and no future problems are anticipated with regard to intersection sight distance.

3.10 CONSTRUCTION TRAFFIC IMPACTS

Construction is expected to occur over a 36 month period. Construction traffic is expected to access the site from Cottonwood Avenue via Mission Gorge Road. Construction activities, on average, are anticipated to result in 50 roundtrip truck trips per day and 45 roundtrip vehicle trips per day. Construction assumptions also include the following:

- All construction workers would drive alone to the construction site. No substantial use of public transit is anticipated.
- All construction workers would assemble at the construction site (as opposed to assembling at an offsite location and shutting to the project site).
- Construction activities would peak in October 2010.
- A peak construction work force is estimated at 45 workers per day.
- All construction activity would take place during only one shift per day.
- All workers would arrive and leave at the beginning and end of the shift (i.e. two trips per employee per day).
- Approximately 50 construction material vehicles are expected per day.

Although the project would result in a temporary increase in traffic on local area roadways during construction, this short-term and limited construction-related traffic would not create a substantial impact on traffic volumes nor change traffic patterns in such a way as to result in unacceptable LOS (i.e. LOS D or worse) on local area roadways or intersections. This conclusion is based on the fact that construction traffic would be less than the traffic generated by the project upon opening and the project has been determined to have no direct impacts at the time it opens. Furthermore, as described in Section 1.2.1.6 of the EIR, the proposed project includes implementation of Traffic Control Plan to manage construction traffic and potential hazards.



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3.11 CONGESTION MANAGEMENT PROGRAM

The Congestion Management Program (CMP) update is intended to directly link land use, transportation and air quality through Level of Service performance. The CMP requires an enhanced CEQA review for all large projects that are expected to generate either more than 2,400 ADT or more than 200 peak hour trips. Since the proposed project is not expected to generate more than 2,400 ADT or over 200 peak hour trips, the CMP analysis is not needed for the proposed detention facility.

3.12 SR 52 EXTENSION AND IMPACTS

CALTRANS has proposed the extension of SR 52 from SR 125 to SR 67. SR 52 extension is planned as a four-lane freeway in the City of Santee between SR 125 to SR 67. The extension would include new roadway, bridges and interchanges at Fanita Drive, Cuyamaca Street and Magnolia Avenue. Currently SR 52 ends at SR 125. The extension of SR 52 is expected to be completed and open to traffic in late 2010. This extension of SR 52 would carry approximately 42,000 ADT in 2011 and approximately 112,000 ADT in year 2030. The extension is expected to take around 30% of the ADT utilizing Mission Gorge Road and also reduce some of the heavy traffic burden now carried by adjacent roads. The extension of SR 52 is expected to be completed before the opening day of the proposed detention facility and the opening day conditions of the proposed project assumes the completion of SR 52. Appendix E provides information about the SR 52 extension plans.

4.0 IMPACT SUMMARY

4.1 IMPACT SUMMARY

The project does not cause direct impacts to the roadway segments or intersections in the . study area. The project causes cumulative significant impacts to the segment of Magnolia Avenue between Mission Gorge Road and Riverview Parkway in the future with project 2030 conditions. Table 6A shows the capacity analysis results for the roadway segments in the study area for all the scenarios Table 6B shows the summary of impacts on the roadway segments in the study area for all the scenarios.

The project causes cumulative significant impacts to the intersections of Mission Gorge Road / Cuyamaca Street and Prospect Avenue / Magnolia Avenue in the opening day conditions. Taking into account the overall growth between opening day and horizon year (2030) there is a proportional increase in the traffic volumes and this results in cumulative impacts at the two intersections of Mission Gorge Road / Cuyamaca Avenue and Prospect Avenue / Magnolia Avenue in the future with project (2030) conditions There are no cumulative impacts at the intersection of Mission Gorge Road / Magnolia Avenue in the opening day conditions but this intersection has cumulative impacts in the future with project (2030) conditions. Table 7A shows the capacity analysis results for all the intersections in the study area for all the scenarios. Table 7B shows the summary of impacts at the intersections for all the scenarios.

4.2 ROAD SEGMENTS

4.2.1 GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE

The County of San Diego guidelines for determination of significance of impacts for roadway segments state that the project would cause significant traffic impacts when:

- The project was expected to cause a roadway segment to fall below LOS D operating conditions.
- The project added a significant amount of traffic to a roadway segment expected to operate at LOS E or F.

This significance criteria is used to determine direct as well as cumulative impacts. For cumulative impacts, the guidelines state that by adding the proposed project trips to all other trips from a list of projects, the significance criteria stated above must be used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.



4.2.2 SIGNIFICANCE OF IMPACTS PRIOR TO MITIGATION

The project does not result in a direct significant impact to the study area roadway segments in the existing plus project conditions. The project does not result in cumulative impacts to the study area roadway segments in opening day conditions. All segments within the study area are expected to operate at LOS D or better in the existing plus project, existing plus cumulative and opening day conditions. However, overall growth and cumulative developments does result in impacts to the segment of Magnolia Avenue between future proposed Riverview Parkway and Mission Gorge Road in future no project (2030) conditions.

This segment is operating below LOS D in the future no project conditions.

Table 5 shows the classification of the study area roadway segments based on the City of Santee Circulation Element.

Since the proposed Las Colinas facility adds trips to the segment of Magnolia Avenue between Mission Gorge Road and future proposed Riverview Parkway which is already operating below LOS D, the project becomes a part of the cumulative impacts occurring at this segment in the future with project (2030) conditions. Therefore it can be concluded that the project causes cumulative significant impacts to the segment of Magnolia Avenue between Mission Gorge Road and Riverview Parkway. Table 6A shows the capacity analysis results of the segments in the study area for all the scenarios. Table 6B shows the impact summary for all the scenarios for the street segments in the study area. Appendix F provides information about the County of San Diego table for determining roadway segment capacity analysis.

4.2.3 CONCLUSIONS

The project does not cause direct impacts to the roadway segments within the study area. The project causes significant cumulative impacts to the segment of Magnolia Avenue between Mission Gorge Road and Riverview Parkway in the future with project 2030 conditions.



4-2

TABLE 5: STUDY AREA ROADWAY SEGMENTS CHARACTERISTICS

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own Center Parkway, Mission Gorge Road - Cuyamaca Street Pri	Prime Arterial	Four	Prime Arterial	1++[1		
		100 mm			Lathway	INOL
Riverview Parkway** Civic Center Drive - Magnoffa Avenue						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	S SHANGER STREET, STRE	1	rainway	DW.1	Parkway	Four
Magnolla Avenue, Mission Gorge Road - Riverview Parkway Ma	Major Arterial	Four	Major Arterial	Four	Major Arterial	Four
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Woodside Avenue, Magnolia Avenue - SR 67	Maior Arterial	TO II	14 - Circle A 10:101			
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			TABLE	8A : STUC	Y AREA	ROADW	AY SEGN	IENTS C.	APACITY	TABLE 6A : STUDY AREA ROADWAY SEGMENTS CAPACITY ANALYSIS								
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Mission Gorge Road, Town Center Pkwy · Cuyamaca St	30,300	0.81	m	30,500	0.82	10	31,900	0.86	6	32,200	0.86	6	34,300	0.92	В	34,500	0.03	m
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Mission Gorge Road, Cottonwood Ave - Magnolia Ave	25,900	0.70	m	28,000	0.70	Œ	27,200	0.73	0	27,400	0.74		22,300	0,60	m	22,500	0.50	
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Town Center Pkwy, Mission Gorge Road - Cuyamaca St	11,900	0.80	A	12,000	0.81	4	12,500	0,84	∢	12,600	0.85	∢	29,000	76.0	υ	29,100	0.96	υ
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Riverview Pkwy**, Civic Center Drive - Magnolia Ave		,	•	-		,		,		16,000	09.0		24,600	66.0	æ	25,500	0.86	c
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Magnolia Ave, Mission Gorge - Riverview Parkway**	18,800	0.75	В	19,200	0.77	æ	19,500	0.78	8	20,600	0.81	æ	56,300	0.98	‡	58,800	66.0	‡
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Magnolia Ave, Riverview Parkway *** Mast Boulevard	18,600	0.75	В	19,200	0.77	п	19,500	0.78	10	20,600	0.81	Œ	41,900	0.83	۵	42,000	0.94	m
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Magnolia Ave, Mission Gorge - Prospect Avenue	25,100	0.67	В	25,600	69.0	m	26,400	0.71	ш	26,900	0.72	ш	54,400	0.95	_	54,900	0.94	۵
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Woodside Avenue, Magnolia Avenue - SR 87	23,300	0.94	В	23,800	0.95	m	24,500	0.99	m	24,800	0.83	ט	35,400	0.95	U	36,700	0.95	۵
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**Riverview Parkway is a planned roadway in circulation elemant. **Cumulative Impacts

STUDY SCENARIO	IMPACT SUMMMARY
EXISTING	NO IMPACTS
EXISTING PLUS PROJECT	NO DIRECT SIGNIFICANT IMPACTS
EXISTING PLUS CUMULATIVE	NO CUMULATIVE IMPACTS
EXISTING PLUS CUMULATIVE PLUS PROJECT (OPENING DAY)	NO CUMULATIVE SIGNIFICANT IMPACTS
FUTURE NO PROJECT (2030)	CUMULATIVE IMPACT AT SEGMENT OF MAGNOLIA AVENUE BETWEEN MISSION GORGE ROAD - RIVERVIEW PARKWAY
FUTURE PLUS PROJECT (2030)	CUMULATIVE SIGNIFICANT IMPACT AT SEGMENT OF MAGNOLIA AVENUE BETWEEN MISSION GORGE ROAD - RIVERVIEW PARKWAY

4.3 INTERSECTIONS

4.3.1 GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE

The County of San Diego guidelines for determination of significance of impacts for intersections state that the project would cause significant traffic impacts when:

- The project was expected to cause an intersection to fall below LOS D operating conditions.
- The additional traffic generated by the proposed project will significantly increase congestion at an intersection currently operating at LOS E or F.

This significance criterion is used to determine direct as well as cumulative impacts. For cumulative impacts, the guidelines state that by adding the proposed project trips to all other trips from a list of projects, the significance criteria stated above must be used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.

4.3.2 SIGNIFICANCE OF IMPACTS PRIOR TO MITIGATION

The intersections of Mission Gorge Road / Cuyamaca Street and Prospect Avenue / Magnolia Avenue operate below LOS D in the existing plus cumulative conditions. On opening day, the project adds trips to these intersections that operate below LOS D; the project becomes a part of the cumulative impacts at these intersections. Therefore, it can be concluded that the project causes cumulative significant impacts to the intersections of Mission Gorge Road / Cuyamaca Street and Prospect Avenue / Magnolia Avenue in the opening day scenario.

Overall growth and cumulative developments are expected to cause the intersections of Mission Gorge Road / Cuyamaca Street, Mission Gorge Road / Magnolia Avenue and Prospect Avenue / Magnolia Avenue to operate below LOS D in the future no project (2030) conditions. Since the proposed Las Colinas facility adds trips to the three intersections stated above that are already operating below LOS D, the project becomes a part of the cumulative impacts occurring at the three intersections. Therefore, it can be concluded that the project causes cumulative significant impacts to the intersections of Mission Gorge Road / Magnolia Avenue , Mission Gorge Road / Cuyamaca Street and Prospect Avenue / Magnolia Avenue in future with project (2030) conditions.



Table 7A shows the capacity analysis results for the intersections for all the scenarios. Table 7B shows the impact summary for all the scenarios. Appendix G shows the capacity analysis calculations. Figure 20 shows the expected future lane geometry based on the City of Santee Circulation Element. Figure 27 shows the expected future lane geometry of the project access driveways.

4.3.3 MITIGATION MEASURES

The project could contribute its fair share to the estimated costs for improving the three intersections provided in the City of Santee Master Plan.

The City of Santee has adopted the "Traffic Improvement Master Plan" (Master Plan) prepared by Meyer, Mohaddes Associates (January 2007). The Master Plan ranks congested intersections (with 1 being the most congested and in need of improvement) and identifies Mission Gorge Road / Magnolia Avenue as the number one congested intersection, Mission Gorge Road / Cuyamaca Street as the number two congested intersection and Prospect Avenue / Magnolia Avenue as the number seven congested intersection in the City of Santee.

The Master Plan suggests potential short terms enhancements to improve the three intersections and also provides cost estimates likely to be incurred to improve the three impacted intersections. This information provided in the City of Santee Master Plan is as follows:

- For the intersection of Mission Gorge Road / Magnolia Avenue, the Master Plan states that on the basis of the field investigations conducted, there is no room for additional capacity at the intersection of Magnolia Avenue / Mission Gorge Road in any direction. The Master Plan recommends relocating westbound advanced loop detectors to the Caltrans suggested minimum setback distance of 285 feet as minor modification. As a part of the City of Santee future capital improvement program (CIP), the cost of improvement to the intersection of Magnolia Avenue / Mission Gorge Road is expected to be \$ 3,309,200.
- For the intersection of Mission Gorge Road / Cuyamaca Street, the Master Plan recommends upgrading traffic signal equipment to provide better trolley and vehicle traffic flow through Cuyamaca Street corridor as a mid-range and long term improvement for the intersection. The Master Plan identifies an additional northbound right turn lane as long term capacity enhancement to improve the LOS at the intersection of Mission Gorge Road / Cuyamaca Street. As a part of the City of Santee future CIP, the cost of improvements to the intersection of Mission Gorge Road / Cuyamaca Street is expected to be \$ 382,000.



	TABLE		UDY AREA	INTERSE	CTION CAP,	ACITY AN	A: STUDY AREA INTERSECTION CAPACITY ANALYSIS (HCM)	IM)				
Intersection	Existing	gu	Existing + Project	• Project	Existing + Cumulative	ng + ative	Existing + Cumulative + Project (Opening Day)	umulative Opening)	Year 2030 Future No Project	uture No ct	Year 2030 Future + Project	330 Project
	Avg. Delay AM/PM (Sec)	LOS AM/PM	Avg. Delay AM/PM (Sec)	LOS AM/PM	Avg. Delay AM/PM (Sec)	LOS AM/PM	Avg. Delay AM/PM (Sec)	LOS	LOS Avg. Delay AM/PM AM/PM (Sec)	LOS AM/PM	Avg. Delay AM/PM	LOS AM/PM
		The state of the s				10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	200 mm		100			
Cuyamaca Street / Town Center Parkway	34.6/37.9	C/D	34.6/38.0	C/D	35.3/42.4	Q/0	36,4/48.9	0/0	36.0/52.6	O/O	37.2/37.4	O/O
			Miss Prigates		The West Spilling	100	100 mm m m m m m m m m m m m m m m m m m				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Mission Gorge Road / Cuyamaca Street	34.8/46.3	C/D	34.9/44.6	C/D	36.1/>80.0	D/F	36.5/>80.0	D/F	43.8/>80.0	D/F	44.3/>80.0	D/Fit
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Mission Gorge Road / Cottonwood Avenue	16.0/17.5	B/B	16.3/17.8	B/B	16.2/17.8	B/B	22.5/23.4	C/C	25.3/35.6	C/D	27.0/49.0	C/D
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Mission Gorge Road / Magnolia Avenue	46.0/48.1	QQ	46.6/48.8	O/O	51.0/53.9	O/O	53.4/56.5	O'O	>80.0/>80.0	F/F	>80.0/>80.0	F/F ⁺⁺
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Prospect Avenue / Magnolia Avenue	36.5/59.9	DVE	44.6/56.3	D/E	50.1/>80.0	님	53.7/>80.0	D/F ⁺⁺	49.6/>80.0	D/F	48.7/>80.0	D/F**
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Magnolia Avenue / Ríverview Parkway **	-	'	1	•	-	•	21.2/22.1	B/C	33.1/35.1	S	44.9/42.3	200
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** Intersections exist only in the future scenario
** Cumulative Impacts

TABLE	7B : STUDY AREA INTERSECTIONS IMPACT SUMMARY
STUDY SCENARIO	IMPACT SUMMMARY
EXISTING	NO IMPACTS
EXISTING PLUS PROJECT	NO DIRECT IMPACTS
EXISTING PLUS CUMULATIVE	CUMULATIVE IMPACTS AT INTERSECTION OF PROSPECT AVE / MAGNOLIA AVE AND MISSION GORGE ROAD / CUYAMACA ST
EXISTING PLUS CUMULATIVE PLUS PROJECT (OPENING DAY)	CUMULATIVE SIGNIFICANT IMPACTS AT INTERSECTION OF PROSPECT AVE / MAGNOLIA AVE AND MISSION GORGE ROAD / CUYAMACA ST
FUTURE NO PROJECT (2030)	CUMULATIVE IMPACTS AT INTERSECTION OF PROSPECT AVE / MAGNOLIA AVE ,MISSION GORGE ROAD / CUYAMACA ST AND MISSION GORGE ROAD / MAGNOLIA AVENUE
FUTURE PLUS PROJECT (2030)	CUMULATIVE SIGNIFICANT IMPACTS AT INTERSECTION OF PROSPECT AVE / MAGNOLIA AVE ,MISSION GORGE ROAD / CUYAMACA ST AND MISSION GORGE ROAD / MAGNOLIA AVENUE

- For the intersection of Prospect Avenue / Magnolia Avenue, the Master Plan recommends that the existing controller should be changed to a Caltrans compliant controller for better communication with Caltrans signal and for a smoother traffic flow at the intersection. As a part of the City of Santee future CIP, the cost of improvements to the intersection of Prospect Avenue / Magnolia Avenue is expected to be \$ 338,000.
- As a part of the City of Santee future CIP, the cost of widening the segment of Magnolia Avenue from Mission Gorge Road – Chubb lane is expected to be \$ 3,395,300.

The calculation methodology used to determine the fair share of the project's cumulative impacts out of the overall cumulative impacts at the impacted segment and three intersections is given below:

% of project traffic = Traffic generated by the project only / (Future plus project minus Existing traffic)

Using the above formula, the ADT component of the project of the total cumulative impacts for the segment of Magnolia Avenue between Mission Gorge Road and future proposed Riverview Parkway is 1.37%.

Using the above formula, the ADT, AM and PM component of the project of the total cumulative impacts at the intersection of Mission Gorge Road / Magnolia Avenue is 0.24 % in the ADT, 0.52 % in the AM peak hour and 0.19 % in the PM peak hour.

Using the above formula, the ADT, AM and PM component of the project of the total cumulative impacts at the intersection of Mission Gorge Road / Cuyamaca Street is 2.90 % in the ADT, 2.90 % in the AM peak hour and 1.32 % in the PM peak hour.

Using the above formula, the ADT, AM and PM component of the project of the total cumulative impacts at the intersection of Prospect Avenue / Magnolia Avenue is 2.40 % in the ADT, 2.77 % in the AM peak hour and 3.20 % in the PM peak hour.

The fair share costs for mitigation for the project's direct impacts as well as cumulative impacts to the three impacted intersections and one roadway segment can be calculated as follows:

- Fair Share cost for mitigating project's cumulative impacts at intersection of Prospect Avenue / Magnolia Avenue = ADT fair share percentage of the project at the intersection * Estimated Costs for improving the intersection provided in the City of Santee master plan = (2.40% * 338000) = \$ 8,112.
- Fair Share cost for mitigating project's cumulative impacts at intersection of Mission Gorge Road / Magnolia Avenue = ADT fair share percentage of the project at the intersection * Estimated Costs for improving the intersection provided in the City of Santee master plan = (0.24 % * 3309200) = \$ 7,942
- Fair Share cost for mitigating project's cumulative impacts at intersection of Mission Gorge Road / Cuyamaca Street = ADT fair share percentage of the project at the intersection * Estimated Costs for improving the intersection provided in the City of Santee master plan = (2.90 % * 382000) = \$ 11,078
- Fair Share cost for mitigating project's cumulative impacts at segment of Magnolia Avenue between Mission Gorge Road – Riverview Parkway = ADT fair share percentage of the project at the intersection * Estimated Costs for widening the Magnolia Avenue segment from Mission Gorge Road – Chubb lane provided in the City of Santee master plan = (1.37 % * 3395300) = \$ 46,515

Table 8 also summarizes the information of the fair share costs mentioned in the discussion above.

The County shall pay its fair share portion of the costs for the improvements as provided in the City of Santee Master Plan and future CIP program as mitigation for the project's impacts. However, since the County does not have the ability to implement the improvements it cannot ensure that the mitigation will be in place prior to the realization of the project's impact and the impact can be considered to be significant and not mitigated.

Appendix H includes the information from the City of Santee Transportation Improvement Master Plan.



4.3.4 CONCLUSIONS

The proposed Las Colinas Detention Facility will have its main access off the Riverview Parkway. Future Riverview Parkway will be built from the LCDF project's western boundary map to Magnolia Avenue according to the Riverview Office Park Tentative Parcel Map (TP 2005-04, recorded December 21, 2006) and will be extended as a part of the Santee Office Park project approved by the City of Santee.

Riverview Parkway is expected to be completed before the opening day of the Las Colinas Detention Facility. Opening day scenario for the Las Colinas Detention Facility assumes the extension of Riverview Parkway. Riverview Parkway is also shown as a planned roadway in the City of Santee Circulation Element for horizon year 2020.

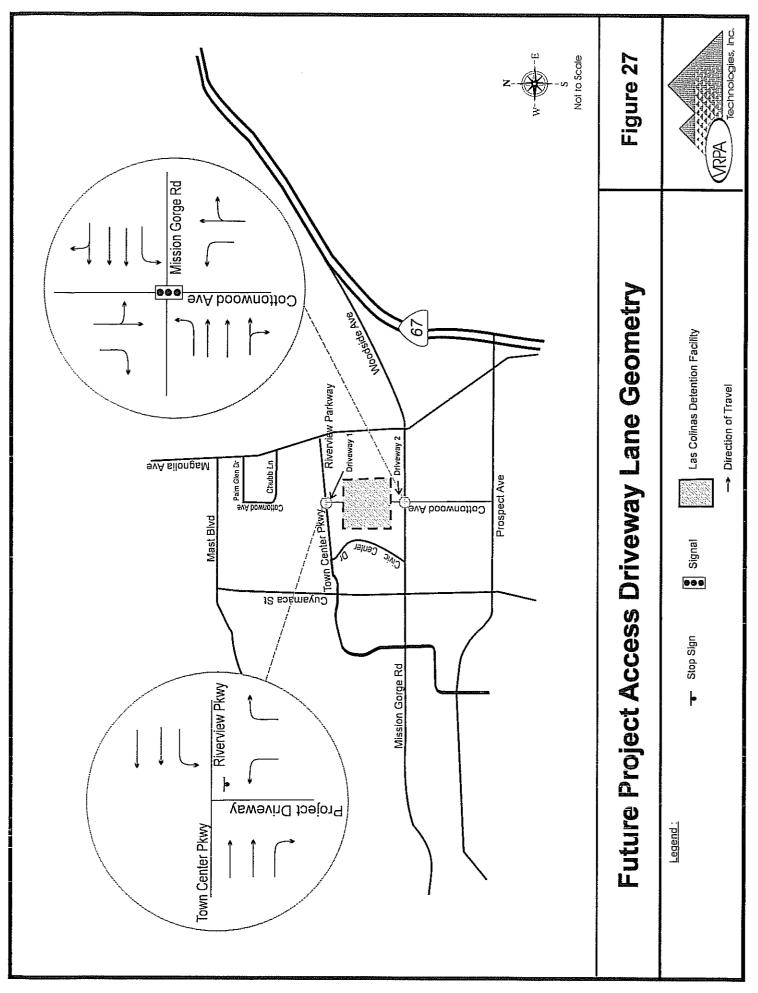
The project does not cause direct significant impacts to the roadway segments and intersections in the study area.

The project causes cumulative significant impacts to the segment of Magnolia Avenue between Mission Gorge Road and Riverview Parkway in the future with project (2030) conditions.

The project causes cumulative significant impacts to the intersection of Mission Gorge Road / Cuyamaca Street and Prospect Avenue / Magnolia Avenue in the opening day conditions. The project causes cumulative significant impacts to intersections of Mission Gorge Road / Cuyamaca Street, Mission Gorge Road / Magnolia Avenue and Prospect Avenue / Magnolia Avenue in the future with project (2030) conditions.

The project could contribute its fair share to the estimated costs for improving the three intersections and one roadway segment impacted by the proposed project at a cumulative level as provided in the City of Santee's Transportation Improvement Master Plan. However, since the County does not have the ability to implement the improvements and it cannot ensure that the mitigation will be in place prior to realization of the project's impact and therefore the impact is considered to be significant and not fully mitigated.

TABLE 8: F.	TABLE 8 : FAIR SHARE COST INFORMATION	FORMATION	
F IMPACTED INTERSECTIONS	FAIR SHARE ADT % FOR CUMULATIVE IMPACTS	ESTIMATED IMPROVEMENTS FOR CUMULATIVE COSTS IMPACT MITIGATION	FAIR SHARE COSTS FOR CUMULATIVE IMPACT MITIGATION
PROSPECT AVENUE / MAGNOLIA AVENUE	2.40%	\$338,000	\$8,112
MISSION GORGE ROAD / MAGNOLIA AVENUE	0.24%	\$3,309,200	\$7,942
MISSION GORGE ROAD / CUYAMACA STREET	2.90%	\$382,000	\$11,078
IMPACTED SEGMENT			
MAGNOLIA AVENUE, MISSION GORGE ROAD - RIVERVIEW PARKWAY	1.37%	\$3,395,300	546,516
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5.0 SUMMARY OF IMPACTS AND MITIGATION

ROAD SEGMENTS:

The project does not cause direct impacts to the segments within the study area. The project causes significant cumulative impacts to the segment of Magnolia Avenue between Mission Gorge Road and Riverview Parkway in the future with project 2030 conditions.

INTERSECTIONS:

The project does not cause direct significant impacts to the intersections within the study area. The project causes cumulative significant impacts to the intersection of Cuyamaca Street / Mission Gorge Road and Prospect Avenue / Magnolia Avenue in the opening day conditions. The project causes cumulative significant impacts to intersections of Cuyamaca Street / Mission Gorge Road, Magnolia Avenue / Mission Gorge Road and Magnolia Avenue / Prospect Avenue in the future with project (2030) conditions.

MITIGATION:

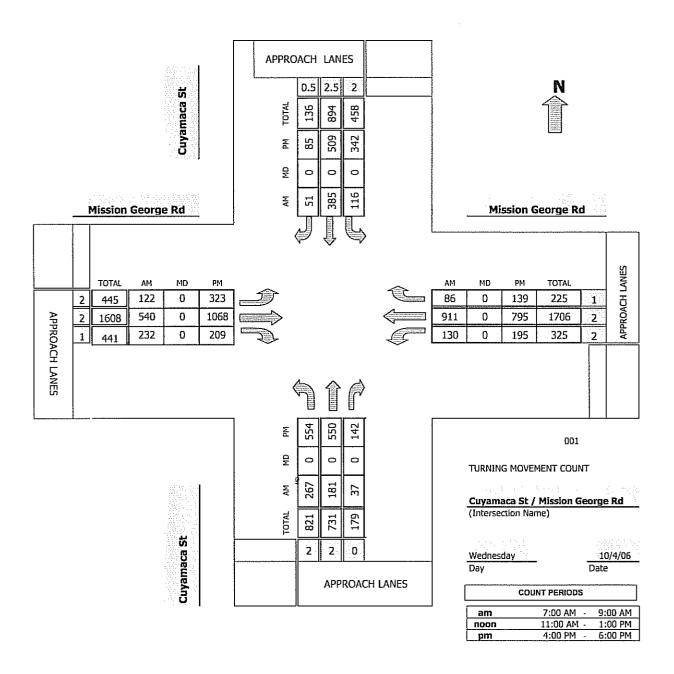
The project in discussion with the City of Santee can contribute its fair share costs to the different improvements identified in the City of Santee Transportation Improvement Master plan for intersections and segments cumulatively impacted by the project. However, since the County does not have the ability to implement the improvements, it cannot ensure that the mitigation will be in place prior to realization of the project's impact and the impact is considered to be significant and not mitigated.



APPENDIX A

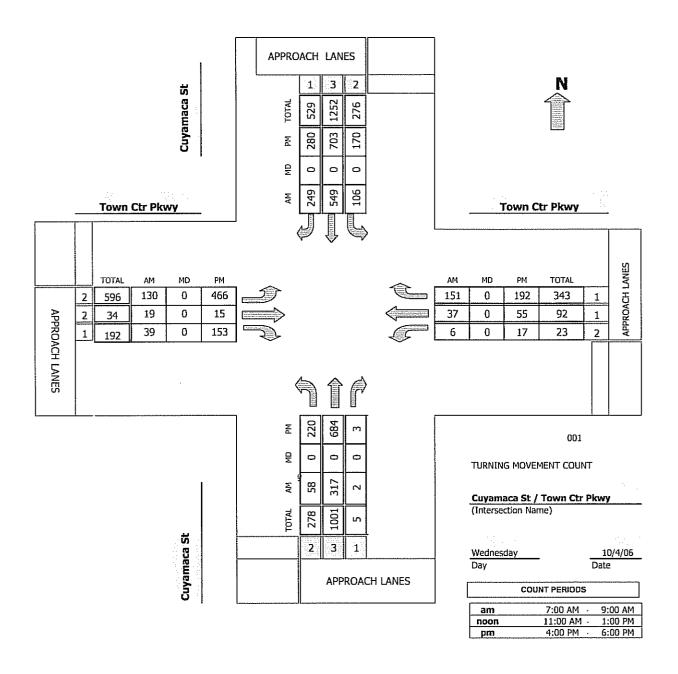
Traffic Count Data

TMC Summary of Cuyamaca St/Mission George Rd



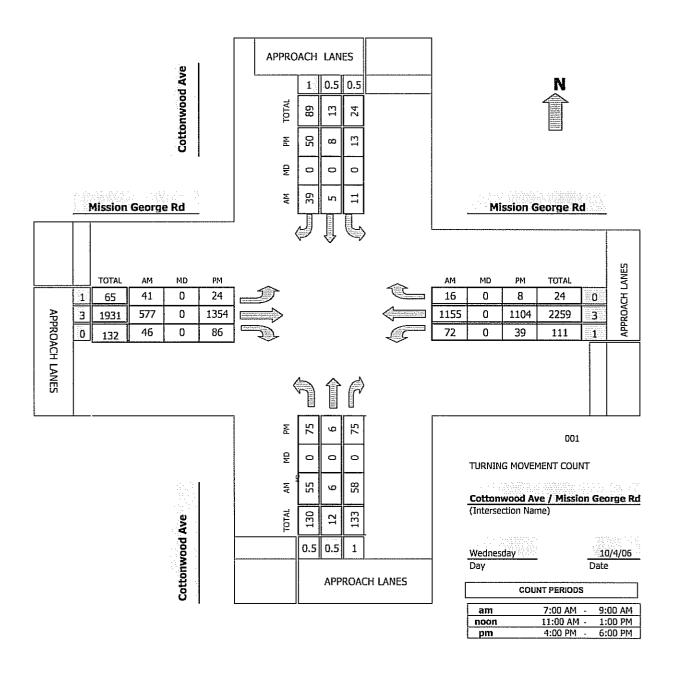
AM PEAK HOUR	715 AM
NOON PEAK HOUR	MA 0
PM PEAK HOUR	430 PM

TMC Summary of Cuyamaca St/Town Ctr Pkwy



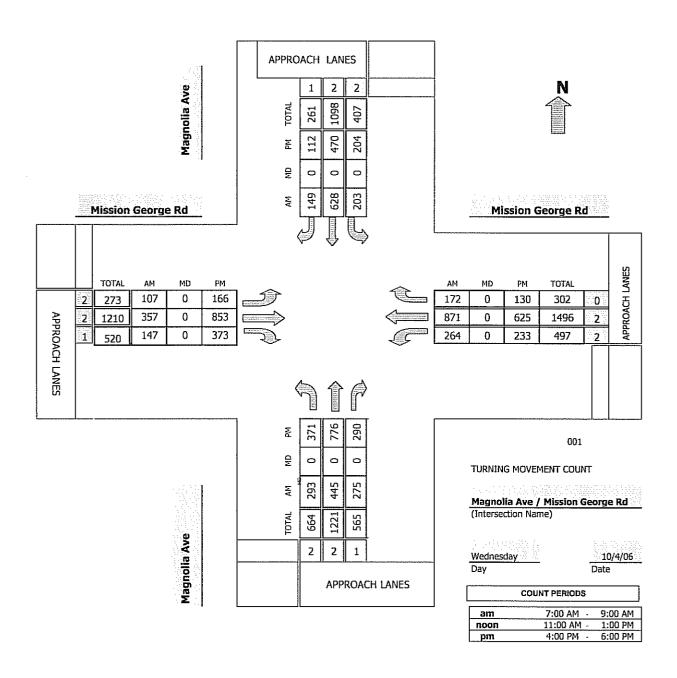
AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

TMC Summary of Cottonwood Ave/Mission George Rd



AM PEAK HOUR	745 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	400 PM

TMC Summary of Magnolia Ave/Mission George Rd



AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

Volumes for: Thursday, February 28, 2008

City: Santee

Project #: 08-4055-001

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05:00	9		2				17:00	13		8				
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	15		22											<u> </u>
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06:45	46	84	3	39		123	18:45	4	24	4	33	****		57
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07:30	5		8				19:30	9		7				
07:45	12	41	7	26		67	19:45	6	27	7	24			51
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08:15	8		3				20:15	2		9				
08:30	1		3				20:30	4		11				
08:45	7	25	0	12		37	20:45	3	12	3	26			38
09:00	7		6				21:00	6		8				***
0 9 :15	4		3				21:15	1		1				
09:30	4		4				21:30	4		4				
09:45	9	24	3	16		40	21:45	6	17	7	20			37
10:00	4		5				22:00	1		12	*****	745 WIL		**************************************
10:15	6		6				22:15	1		4				
10:30	6		13				22:30	6		5				
10:45	7	23	11	35		58	22:45	9	17	5	26			43
11:00	3		6						+1					כד
							23:00	4		2				
11:15 11:30	7 2		6 6				23:15 23:30	2		13				
	3	1.5	9	27		47		1	0	3	10			27
11:45	<u></u>	15	3			42	23:45	1	8	1	19		· · · · · · · · · · · · · · · · · · ·	27
Total Vol.		310	-	201		511			343		421			764
												Daily Totals		
								_	NB		SB	EB	WB	Combined
								-	653		622			1275
					AM							PM		22,5
Split %		60.7%		39.3%	* ** F	40.1%		~	44.9%		55.1%	F J*3		59.9%
		-			· · · · · · · · · · · · · · · · · · ·									
Peak Hour		06:00	. *	05:30		06:00			13:15		15:00			15:00
Volume		84		41		123			58		90			120
P.H.F.		0.46		0.47		0.63			0.77		0.68			0.75

Volumes for: Friday, February 29, 2008

City: Santee

Project #: 08-4055-001

1.00-1	C-11-			. NI/~ N/	lissian Cara - C '	City:	Cin. Ct-11				, roject	#. 00 h		•
Location: AM Period		onwoo	d Av∈ SB		lission Gorge Rd EB WB		Fire Station PM Period	NB		SB	EB	WB		
00:00	2		3		-M		12:00	7		9	الباليا	VVD		
00:15	1		3				12:15	4		11				
00:30	1		0				12:30	9		3				
00:45	1	5	2	8		13	12:45	12	32	9 32				64
01:00	1		1	<u>. </u>						-				
01:00	4		4				13:00	6		5				
01:13	0		3				13:15	5		7				
01:45	2	7	1	9		16	13:30 13:45	8 11	30	7 6 25				FF
						10								55
02:00	2		2				14:00	5		11				
02:15	1		0				14:15	3		15				
02:30	2	.,,	3	-		13	14:30	9		4				
02:45	2	7	0	5		12	14:45	16	33	10 40				73
03:00	1		0				15:00	8		15				
03:15	1		0				15:15	8		22				
03:30	0		2				15:30	5		28				
03:45	1	3	1	3		6	15:45	12	33	11 76				109
04:00	3		0				16:00	3		9				
04:15	3		4				16:15	5		10				
04:30	1		2				16:30	8		9				
04:45	6	13	0	6		19	16:45	6	22	6 34				56
05:00	17		5				17:00	16		8				
05:15	12		4				17:15	9		6				
05:30	2		3				17:30	5		5				
05:45	19	50	10	22		72	17:45	9	39	9 28				67
06:00	11		19				18:00	6		22				***************************************
06:15	6		4				18:15	5		13				
06:30	10		4				18:30	0		6				
06:45	40	67	4	31		98	18:45	4	15	6 47				62
07:00	18		7			Jiii	19:00	3	*****	4				
07:15	14		11				19:15	5		8				
07:30	10		12				19:30	2		4				
07:45	10	52	4	34		86	19:45	1	11	3 19				30
08:00	7		4					~						30
08:15	7						20:00	4		1				
08:30	4		4 2				20:15 20:30	5		2				
08:45	5	23	2	12		35		1	12	2				25
			**********	12	•		20:45	3	13	7 12				25
09:00	3		2				21:00	6		5				
09:15	4		5				21:15	6		5				
09:30	8	~.	6	40			21:30	3		5				
09:45	6	21	5	18		39	21:45	4	19	5 20				39
10:00	7		4				22:00	3		2				
10:15	8		10				22:15	7		14				
10:30	4		4				22:30	5		4				
10:45	_7	26	10	28		54	22:45	9	24	5 25				49
11:00	7		8				23:00	7		6				
11:15	6		4				23:15	4		13				
11:30	7		6				23:30	3		6				
11:45	2	22	6	24		46	23:45	5	19	4 29				48
Total Vol.		296		200		496	· · · · · ·		290	387				677
, J.M. TUN		_ 20		#AA		730			430	20/		 .		0//
									NB	SB	Daily El	Totals	WB	Combined
													VV 🗗	Combined
					A D.*				586	587	_			1173
eults er	-	F0 =-:			AM	40.001		***	43.000			M		·
Split %		59.7%		40.3%		42.3%			42.8%	57.29	0			57.7%
		06:30		05:45		06:45			14:30	15:00				14:45
Peak Hour		00.00												
Peak Hour Volume		82		37		116			41	76				112

Volumes for: Saturday, March 01, 2008

City: Santee

Project #: 08-4055-001

/						•						rioject #. o	. 1000 00	•
Location: AM Period		onwoo	d Ave SB		lission Gorge Rd an B WB		Fire Station PM Period	MD		_SB		ED 14	VID.	
00:00	1		3		_D VVD		12:00	NB 8				EB V	VB	
00:00	1		4				12:00	21		11 8				
00:30	2		4				12:30	15		13				
00:45	2	6	2	13		19	12:45	12	56	7	39			95
01:00	4		4				13:00	17		8				
01:15	1		4				13:15	16		4				
01:30	2		2				13:30	15		15				
01:45	2	9	4	14		23	13:45	12	60	16	43			103
02:00	3		3			•	14:00	9		23				
02:15	1		1				14:15	7		17				
02:30	2		0				14:30	6		5				
02:45	1	7	2	6		13	14:45	15	37	7	52			89
03:00	2	·	0				15:00	2	***********	13	***************************************	*-		
03:15	3		0				15:15	5		11				
03:30	3		5				15:30	3		21				
03:45	3	11	2	7		18	15:45	7	17	7	52			69
04:00	3		4			-	16:00	4		7				
04:15	3		2				16:15	10		9				
04:30	2		1				16:30	6		5				
04:45	6	14	2	9		23	16:45	8	28	6	27			55
05:00	17		6				17:00	15		4				
05:15	9		2				17:15	11		4				
05:30	2		1				17:30	9		2				
05:45	11	39	10	19		58	17:45	17	52	15	25			77
06:00	10		15				18:00	15		24				
06:15	б		9				18:15	9		11				
06:30	8		2				18:30	10		6				
06:45	20	44	6	32		76	18:45	7	41	4	45		7.6.6	86
07:00	10		1				19:00	3		5				
07:15	14		12				19:15	9		29				
07:30	6		6				19:30	7		9				
07:45	9	39	3	22		61	19:45	7	26	2	45	***************************************		71
08:00	8		4				20:00	1		10				
08:15	8		4				20:15	3		3				
08:30	16		5				20:30	2		4				
08:45	8	40	10	23		63	20:45	1	7	4	21			28
09:00	10		4				21:00	6		4				
09:15	10		8				21:15	2		1				
09:30	11		4				21:30	4		4				
09:45	5	36	15	31		67	21:45	4	16	2	11			27
10:00	4		13				22:00	3		3				
10:15	8		20				22:15	1		9				
10:30	0		8				22:30	4	. –	2				
10:45	4	16	4	45		61	22:45	5	13	3	17			30
11:00	3		3				23:00	6		1				
11:15	4		8				23:15	1		13				
11:30	9	7+	6	25		45	23:30	1		6	22			** *
11:45	5	21	8	25		46	23:45	4	12	2	22			34
Total Vol.		282		246		528			365		399			764
												Daily Tota	ls	
								_	NB		SB	ÉB	WB	Combined
									647		645			1292
					AM							PM		
Split %	·	53,4%		46.6%		40.9%			47.8%		52.2%			59.1%
Peak Hour		06:30		09:45		11:45			12:15		13:30			13:30
												the state of the s		10.00
Volume		- 52		56		. 89			65		71			114

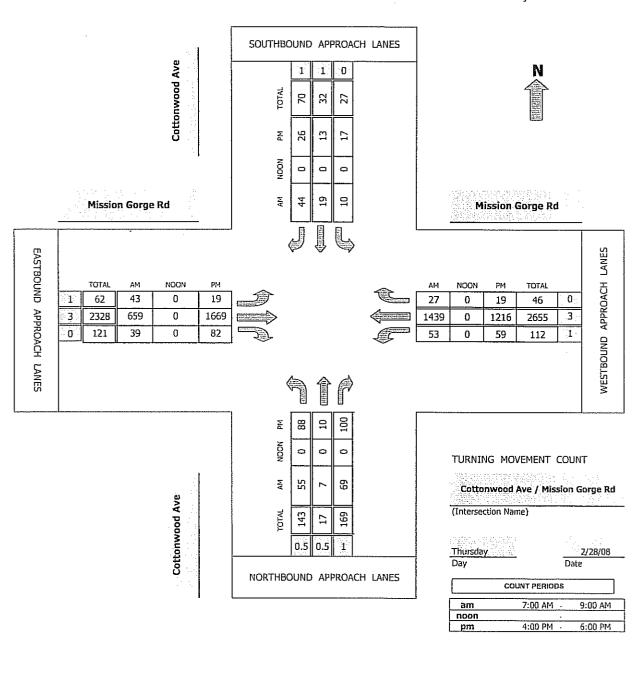
Intersection Turning Movement



National Data & Surveying Services

TMC Summary of Cottonwood Ave/Mission Gorge Rd

Project #: 08-4056-001



AM PEAK HOUR

715 AM

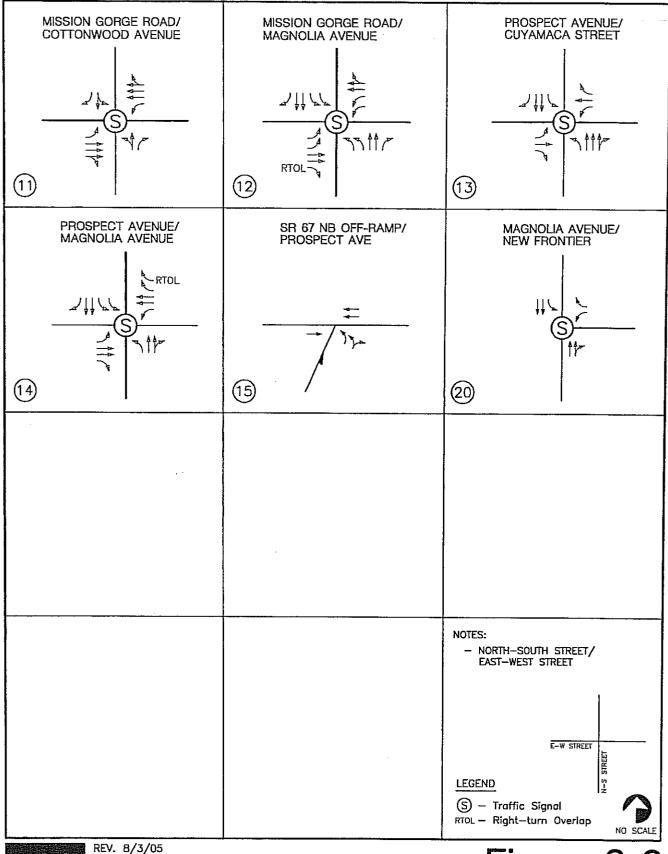
NOON PEAK HOUR

0 AM

PM PEAK HOUR

500 PM

CONTROL: Signalized



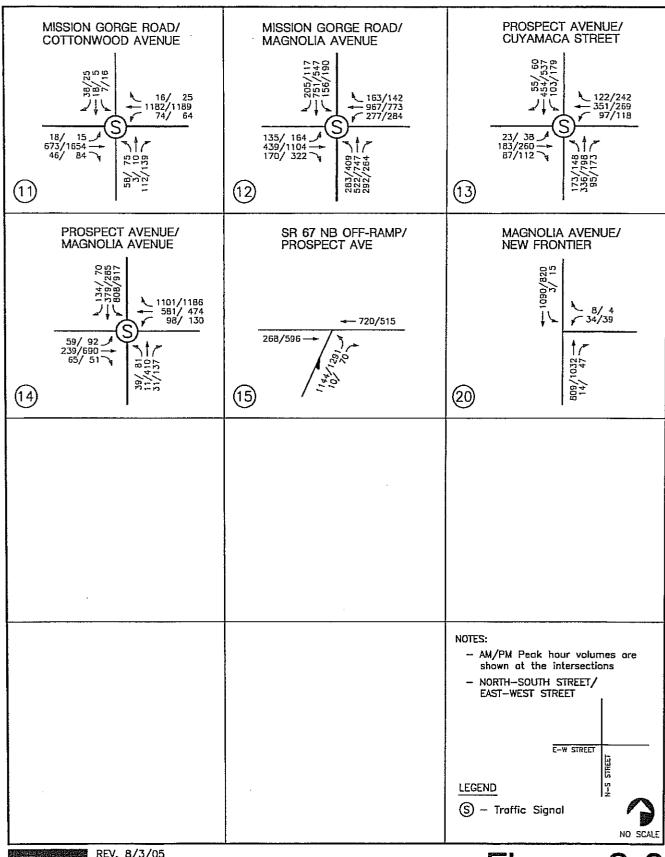
LINSCOTT LAW & GREENSPAN engineers

LLG1386.DWG

Figure

(2 OF 2)

EXISTING INTERSECTION GEOMETRY



LINSCOTT
LAW &
GREENSPAN
engineers

REV. 8/3/05 LLG1386.DWG Figure 3-3

2 OF 2)

EXISTING TRAFFIC VOLUMES AM/PM PEAK HOURS

SANTEE OFFICE PARK

APPENDIX B

City of Santee Circulation Element

CIRCULATION ELEMENT



<u>Policy 6.7</u> The City supports a truck route system that provides for access to all commercial and industrial areas within the City but discourages through truck traffic that does not stop in Santee.

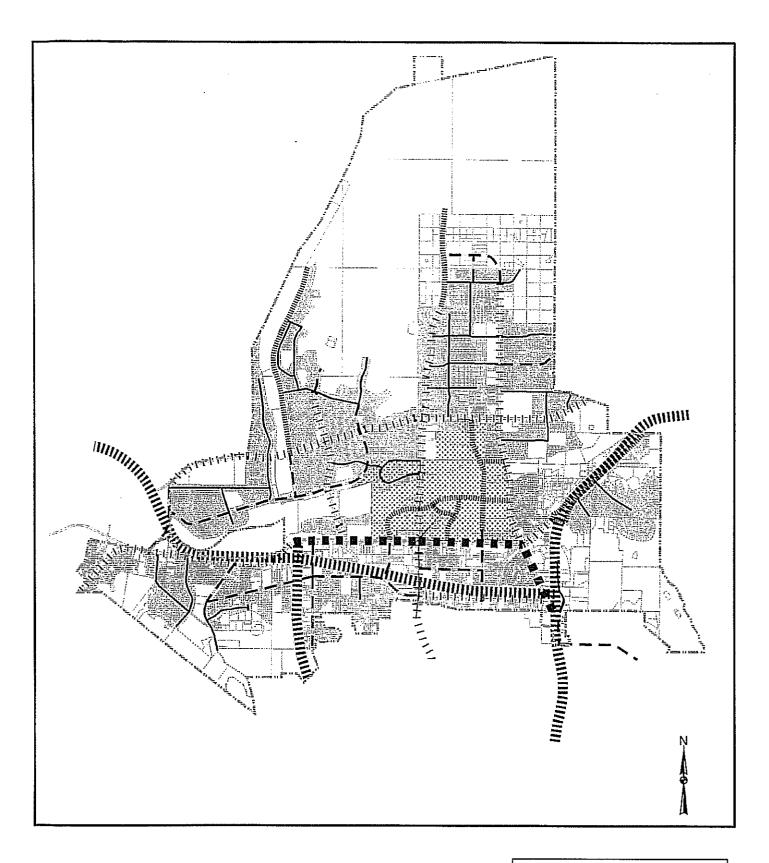
7.0 Implementation

7.1 Circulation Plan

The Circulation Plan as shown on Figure 3-1 represents an extensive road network in terms of both the number of links and classifications. Eight street designations have been used to define differing characteristics among elements of the Circulation Plan:

- a. <u>Freeways</u> are multilane divided highways for through traffic with full control of access and with grade separations at all intersections.
- b. <u>Prime Arterials</u> are six lanes or larger divided roadways with raised, landscaped medians to control turning movements that cross other arterials at grade with signalized intersections. Prime Arterials also have an increased landscaped parkway width between the right-of-way and curb.
- c. <u>Major Arterials</u> are four to six lane divided roadways with landscaped raised medians to control turning movements and that cross other arterials at grade with signalized intersections.
- d. <u>Collectors</u> are feeder or connector roadways that complement the arterial network, but are of lesser capacity, with two or four lanes and striped turning lanes. Collectors typically have signalized or "Stop" sign control at intersections with other circulation element streets.
- e. <u>Industrial Streets</u> are slightly larger local roadways to accommodate commercial vehicles safely in areas of industrial development.
- f. Residential Collectors are two lane distributor roadways, slightly larger than local streets to enhance safety and traffic circulation into and out of neighborhood areas.
- g. <u>Parkways</u> are roadways requiring unique design applications where standard designs cannot be utilized because of steep terrain, right-of-way constraints, special development needs and/or other special conditions.
- h. <u>Local Streets</u> are all streets not designated within the circulation element plan that provide access within residential areas and are designed to discourage through traffic. Local streets are made up of standard residential streets and special situation streets in hillside and other areas. Hillside streets have reduced widths by eliminating parking on one or both sides of the street to reduce grading and biological impacts.













CIRCULATION PLAN FIGURE 3-1

APPENDIX C

County of San Diego Guidelines to determine significance of impacts

by the development, and to maintain a Level of Service D on Circulation Element Roads." "New development that would significantly impact congestion on roads operating at LOS E or F, either currently or as a result of the project, will be denied unless improvements are scheduled to improve the LOS to D or better or appropriate mitigation is provided." The PFE, however, does not specify what would significantly impact congestion or establish criteria for evaluating when increased traffic volumes would significantly impact congestion. The following significance guidelines provided are the County's preferred method for evaluating whether or not increased traffic volumes generated or redistributed from a proposed project will "significantly impact congestion" on County roads, operating at LOS E or F, either currently or as a result of the project.

Traffic volume increases from public or private projects that result in one or more of the following criteria will have a significant traffic volume or level of service traffic impact on a road segment, unless specific facts show that there are other circumstances that mitigate or avoid such impacts:

- The additional or redistributed ADT generated by the proposed project will significantly increase congestion on a Circulation Element Road or State Highway currently operating at LOS E or LOS F, or will cause a Circulation Element Road or State Highway to operate at a LOS E or LOS F as a result of the proposed project as identified in Table 1, or
- The additional or redistributed ADT generated by the proposed project will cause a residential street to exceed its design capacity.

Table 1

Measures of Significant Project Impacts to Congestion on Road Segments

Allowable Increases on Congested Road Segments

Level of service	Two-lane road	Four-lane road	Six-lane road
LOS E	200 ADT	400 ADT	600 ADT
LOS F	100 ADT	200 ADT	300 ADT

Notes:

- 1. By adding proposed project trips to all other trips from a list of projects, this same table must be used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.
- The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.

The first significance criterion listed in Table 1 addresses roadways presently operating at LOS E. Based on these criteria, an impact from new development on an LOS E road would be reached when the increase in average daily trips (ADT) on a two-lane road exceeds 200 ADT. Using SANDAG's "Brief Guide for Vehicular Traffic Generation Rates for the San Diego Region" for most discretionary projects this would generate less than 25 peak hour trips. On average, during peak hour conditions, this would be

that the traffic allowed under the threshold would not significantly impact traffic operation on the road segment.

Non-Circulation Element Residential Streets

Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots and not to carry through traffic, however, for projects that will substantially increase traffic volumes on residential streets, a comparison of the traffic volumes on the residential streets with the recommended design capacity must be provided. Recommended design capacities for residential non-Circulation Element streets are provided in the San Diego County Public and Private Road Standards. Traffic volume that exceeds the design capacity on residential streets may impact residences and should be analyzed on a case-by-case basis.

4.2 Intersections

This section provides guidance for evaluating adverse environmental effects a project may have on signalized and unsignalized intersections.

4.2.1 Signalized

Traffic volume increases from public or private projects that result in one or more of the following criteria will have a significant traffic volume or level of service traffic impact on a road segment:

 The additional or redistributed ADT generated by the proposed project will significantly increase congestion on a signalized intersection currently operating at LOS E or LOS F, or will cause a signalized intersection to operate at a LOS E or LOS F as identified in Table 2.

Table 2
Measures of Significant Project Impacts to Congestion on Intersections
Allowable Increases on Congested Intersections

Level of service	Signalized	Unsignalized
LOS E	Delay of 2 seconds	20 peak hour trips on a critical movement
LOSF	Delay of 1 second, or 5 peak hour trips on a critical movement	5 peak hour trips on a critical movement

Notes:

- 1. A critical movement is one that is experiencing excessive queues.
- By adding proposed project trips to all other trips from a list of projects, these same tables are used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.
- The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.

Table 1 - County Criteria for the Need to Prepare a Traffic Impact Study (TIS)

PROJECT GENERATED TRAFFIC*	FOCUSED TIS	FULL TIS NEEDED	CONGESTION MANAGEMENT ANALYSIS NEEDED
Less than 200 Average Daily Trips OR Less than 20 Peak Hour Trips	No	No	No
500 Average Daily Trips OR 50 Peak Hour Trips	Yes	No	No
1,000 Average Daily Trips OR 100 Peak Hour Trips	No	Yes	No
2,400 Average Daily Trips OR 200 Peak Hour Trips	No	Yes	Yes

^{*} Other situations could result in a request for an Issue Specific or Focused Traffic Impact Study. These include, but are not limited to, those issues addressed in this report.

NOTE: Analysis of cumulative traffic impacts may require a Traffic Impact Study, even when project generated traffic volumes alone do not.

2.1.1 Issue Specific Traffic Impact Study

Generally, an issue specific TIS will be required for projects that generate between 200 and 500 average daily trips (ADT) or between 20 and 50 peak hour trips that may potentially impact or alter the design of a nearby intersection or road segment. Typically, the scope of an issue specific traffic study is limited to nearby roads receiving over 200 ADT (100 ADT is adjacent road is operating at LOS F) and intersections receiving over 20 peak hour trips (5 peak hour trips on a critical move for an adjacent intersection operating at LOS F). County staff may also based upon a field review, public comment, or recommendations of a planning group require an issue specific TIS to address particular traffic issues. For example, an examination of available sight distance, driveway access, access road geometrics and capacity, parking capacity, intersection analysis or a signal timing study are issue specific/focused studies that could be required.

All discretionary projects are required to evaluate project-level (direct) and cumulative traffic impacts that may include preparation of a TIS. When a proposed project generates less than 200 average daily trips (ADT), in most cases (given the distribution of traffic onto County Circulation Element roads and the traffic impact criteria identified

APPENDIX D SANDAG Trip Generation Table

$\ensuremath{\textit{(NOT SO)}}$ BRIEF GUIDE OF VEHICULAR TRAFFIC GENERATION RATES FOR THE SAN DIEGO REGION



401 B Street, Suite 500 San Diego, California 92101 (619) 699-1900 • Fax (619) 699-1950

APRIL 2002

NOTE: This listing only represents a guide of average, or estimated, traffic generation "driveway" rates and some very general trip data for land uses (emphasis on acreage and building square footage) in the San Diego region. These rates (both local and national) are subject to change as future documentation becomes available, or as regional sources are updated. For more specific information regarding traffic data and trip rates, please refer to the San Diego Traffic Generators manual. Always check with local jurisdictions for their preferred or applicable rates.

				•			
LAND USE	TRIP CATEGORIES [PRIMARY:DIVERTED:PASS-BY]"	ESTIMATED WEEKDAY VEHICLE TRIP GENERATION RATE (DRIVEWAY)			96 (plus IN Between 3:0		TRIP LENGTH (Miles) ¹
AGRICULTURE (Open St	pace)[80;1B;2]	2/acre**	•				10.B
-							
Commercial	[78:20:2]	60/scre, 100/flight, 70/1000 sq. ft. * * *	556	(6:4)	6%	(5:5)	12.5
General Aviation Heliports		6/acre, 2/flight, 6/based aircraft* * * 100/acre**	96	(7:3)	15%		
AUTOMOBILE ³							
Car Wash Automatic		900/site, 600/acre**	496	(5:5)	976	(5:5)	
Self-serve		100/wash.stall**	406	(5:5)	634	(5:5)	
Gasoline with/Food Mart	[21:57:28]	160/vehicle fueling space**	7%	(5:5)	E96	(5:5)	2.B
with/Food Mart & Ci		155/vehicle fueling space* *	· 196	(5:5)	996	(5:5)	
Older Service Station Sales (Dealer & Repair)		150/vehicle fueling space, 900/station** 50/1600 sq. ft., 300/acre, 60/service stall* **	7% 9%	(5:5) (7:3)	96 38	(5:5) (4:6)	
Aute Repair Center		20/1000 sq. ft., 400/acre, 20/service stall*	896	(7:3)	1796	(4:5)	
Auto Parts Sales Quick Lube		60/1000 sq. ft. ** 40/service stall **	486 776	(G:A)	70% 10%	(E.E)	
Tire Store		25/1000 sq. ft., 30/service stall**	7%	(6:4) (6:4)	1196	(5:5) (5:5)	
CEMETERY		5/acre*				•	
	[64:25:11]	9/1000 sq. ft., 30/acre** (quadruple rates	596	(6:4)	EG.	(5:5)	5.1
CONTROL DETAILS		for Sunday, or days of assembly)					
COMMERCIAL/RETAIL ^s Super Regional Stroppi	ing Center	35/1000 sq. ft., ^c 400/acre*	476	(7:3)	10%	(5:5)	
(More than 80 acres	s, more than		2	(,,,,,		1,	
800,000 sq. ft., w/t major stores)	usually 3+						•
Regional Shopping Co.	nter[54:35:11]	50/1000 sq. ft., ^c 500/ecre*	496	(7:3)	9%	(5:5)	5.2
(40-80acres, 400,0) sq. (t., w/usually 2+							
Community Shopping (Cesites[47:31:22]	80/1000 sq. ft., 700/acre* **	: 4%	(6:4)	1076	(5:5)	3.6
w/usually 1 major st	100-400,000 sq. ft., ore, detached						
restaurant(s), grocery	y and drugstore)						
Neighborhood Shopping (Less than 15 ocres	Center Less than	120/1000 sq. ft., 1200/acro* **	496	(6:4)	1096	(5:5)	
125,000 sq. ft., w/i	usually grocery						
ಹ ರಗುರ್ಥವರ್ಣ, cleaners ಹ fast food services}	s, beauty & barber shop.						
Commercial Shops	[45:40:15]						
Specialty Retail/Strip Electronics Superston	Commercial e	40/1000 sq. ft., 400/acre* 50/1000 sq. ft**	36	(6:4)	96 10%	(5:5) (5:5)	4,3
Factory Outlet		40/1000 sq. ft.**	3€	(7:3)	996	(5:5)	•
Supermarket Drugstore		150/1000 sq. ft., 2000/scro* ** 90/1000 sq. ft. **	476 476	(7:3) (6:4)	10% 10%	(5:5) (5:5)	
Convenience Market		500/1000 sq. ft.**	E3-6	(5;5)	506	(5:5)	
Convenience Market Convenience Market		700/1000 sq. ft., * * 850/1000 sq. ft., 550/vehicle fueling space * *	934 634	(5:5) (5:5)	7% 7%	(5:5) (5:5)	
Discount Club	,g=======	60/1000 sq. ft., 600/acre* **	196	(7:3)	986	(5.5)	
Discount Store Furniture Store		- 60/1000 sq. ft., 600/acre** 6/1000 sq. ft., 100/acre**	394 496	(6:4) (7:3)	896 996	(5:5) (5:5)	
Lumber Store		30/1000 sq. ft., 150/acre**	7%	(6:4)	96	(5:5) (5:5)	
Home Improvement S Hardware/Paint Store		40/1000 sq. ft., 600/acre**	596 296	(6:4) (6:4)	954 1954	(5:5) (5:5)	
Garden Nursery		40/1000 sq. ft., 90/acro**	326	(6:4) (6:4)	10%	(5:5) (5:5)	
Mixed Use: Commercial	(w/supermarket)/Residential	(110/1000 sq. ft., 2000/acre* (commercial only) 5/dwelling unit, 200/acre* (residential only)	316 986	(6:4) (3:7)	996 1376	(5:5) (6:4)	
EDUCATION				(2,1)	,370	(0.4)	
	[91:9:0]	2.4/student, 100 acre*	10%	(8:2)	9%	(3:7)	6,9
Junior College (2 years	s}[92:7:1]	1.2/student, 24/1000 sq. ft., 120/acro* **	1296	(8:2)	996	(6:4)	9.0
Middle/Junior High	[75:19:6] [63:25:12]	1.3/student, 15/1000 sq. ft., 60/acre* ** 1.4/student, 12/1000 sq. ft. 50/acro**	20% 30%	(7:3) (6:4)	10% 9%	(4:5) {4:6}	4.8 5.0
Elementary	[57:25:10]	1.6/student, 14/1000 sq. ft., 90/ecre* **	32%	(6:4)	996	(4:6) (4:6)	3.4
Day Care	[28:58:14]	5/child, 80/1000 sq. ft.**	17%	(5:5)	18%	(5:5)	3.7
INANCIAL!	[35:42:23]						3.4
Bank (Walk-In only) with Drive-Through		150/1000 sq. ft., 1000/acre* ** 200/1000 sq. ft., 1500/acre*	476 576	(7:3) (6:4)	E%	(4:6)	
Orive-Through only			3/6		1096 1396	(5:5) (5:5)	
		250 (125 one-way)/lano*	26	(5:5)	1376		
Savings & Loan Drive-Throughonly		250 (125 pne-wsy)/lano* 60/1000 sq. ft., 600/scre**	2%	(5:5)	996	1/	
Drive-Through only	######################################	250 (125 one-way)/lano*		(5:5)		1,	
Drive-Through only IOSPITAL General		250 (125 one-way)/lano* 60/1000 sq. ft., 600/acre** 100 (50 one-way)/lane** 20/bsd, 25/1000 sq. ft., 250/acre*	2%	(5:5) (7:3)	996 1576		B.3
Drive-Through only IOSPITAL		250 (125 ane-way)/lane* 60/1000 sq. ft., 600/acre** 100 (50 ane-way)/lane**	236 476		996	(4:6) (4:6)	B.3
Drive-Through only OSPITAL General Convalescent/Nursing IDUSTRIAL		250(125 one-wayl/lane* 60/1000 oq. ft., 600/dcre** 100(50 one-wayl/lane** 20/bed, 25/1000 sq. ft., 250/acre* 3/bed**	26 4% 896 796	(7:3) (6:4)	96 1976 10% 776	(4:6) (4:6)	
Drive-Through only IOSPITAL	(commercial included)	250(125 ane-way)/lane* 60/1000 sq. ft., 600/acre** 100(50 one-way)/lane** 20/bed, 25/1000 sq. ft., 250/acre* 3/bed**	26 46 86 76 1296	(7:3) (6:4)	96 15% 10% 76 12%	(4:6) (4:6)	B.3 9.0
Drive-Through only IDSPITAL	(commercial included) [79:19:2] enrcial) stifts	250 (125 one-way)/lane* 60/1000 sq. ft., 800/scre** 100 (50 one-way)/lane** 20/bed, 25/1000 sq. ft., 250/scre* 3/bed** 16/1000 sq. ft., 200/scre*** 8/1000 sq. ft., 50/scre** 10/1000 sq. ft., 120/scre*	26 494 896 776 1296 1196 1496	(7:3) (6:4) (8:2) (9:1) (8:2)	96 1976 1096 776 1296 1296 1596	(4:6) (4:6) (2:8) (2:3) (3:7)	
Drive-Through only IOSPITAL	(commercial included) [79:19:2] enrcial) stifts	250(125 one-wayl/lane* 60/1000 sq. ft., 60/06/cre** 100 (50 one-wayl/lane** 20/bed, 25/1000 sq. ft., 250/acre* 3/bed.** 16/1000 sq. ft., 200/acre** 16/1000 sq. ft., 90/acre* 10/1000 sq. ft., 50/acre* 4/1000 sq. ft., 50/acre*	256 476 676 776 1276 1176 1476 11976	(7:3) (6:4) (8:2) (8:2) (8:2) (9:1)	96 1576 1096 776 1296 1296 1576 2096	(4:6) (4:6) (2:8) (2:8) (3:7) (2:8)	9.0
Drive-Through only IOSPITAL	(commercial included) [79:19:2] ercial) shifts) [92:5:3] y	250(125 one-wayl/lane* 60/1000 sq. ft., 60/30cre** 100 (50 one-wayl/lane** 20/bad, 25/1000 sq. ft., 250/acre* 3/bad** 16/1000 sq. ft., 200/acre*** 8/1000 sq. ft., 50/acre* 4/1000 sq. ft., 50/acre* 5/1000 sq. ft., 60/acre* 5/1000 sq. ft., 60/acre* 2/1000 sq. ft., 60/acre*	26 46 46 776 1296 14% 14% 1996 13%	(7:3) (6:4) (8:2) (8:1) (8:2) (9:1) (7:3) (5:5)	96 15% 10% 7% 12% 12% 15% 20% 15% 96	(4:6) (4:6) (2:8) (2:8) (3:7) (2:8) (4:6) (5:5)	9.0
Drive-Through only HOSPITAL	(commercial included) [79:19:2] arciol) syllis)	250(125 one-way)/lane* 60/1000 sq. ft., 600/scre** 100(50 one-way)/lane** 20/bed, 25/1000 sq. ft., 250/scre* 3/bed** 16/1000 sq. ft., 200/scre** 16/1000 sq. ft., 200/scre* 4/1000 sq. ft., 50/scre* 4/1000 sq. ft., 50/scre* 4/1000 sq. ft., 50/scre*	26 494 576 1296 1196 1496 1496 1394	(7:3) (6:4) (8:2) (8:1) (8:2) (9:1) (7:3)	96 1996 776 1296 1296 1596 2096 1596	(4:6) (4:6) (2:8) (2:8) (3:7) (2:8)	9.0

LAND USE TRIP CATEGORIES [PRIMARY:DIVERTED:PASS-BY]*	ESTIMATED WEEKDAY VEHICLE TRIP GENERATION RATE (DRIVEWAY)			% (plus IN: Between 3:00	TRIP LENGTH	
LIBRARY [44:44:12]	50/1000 sq. ft., 400/acre**	. 2%	(7:3)	10%	(5:5)	3.9
LODGING[59:38:4]			,		• •	7.6
Hotel (w/convention facilities/restourant)	10/occupied room, 300/acre	606	(6:4)	E%	(6:4)	7.0
Motel Resort Hotel	9/occupied room, 200/acre* B/occupied room, 100/scre*	E% 594	(4:6) (6:4)	9% 7%	(5:4) (4:5)	
Business Hotel	7/occupied room**	E36	(4:6)	96	(6:4)	
MILITARY[82:16:2]	2.5/military & civilian personnel*	E16	(9:1)	10%	(2:8)	11.2
OFFICE Standard Commercial Office	20/1000 sq, ft.,° 300/acre*	1496	{9:1}	1396	(2:6)	8.8
(less than 100,000 sq. ft.) Large (High-Rise) Commercial Office	17/1000 sq. ft.,0 600/acre*	1396	(9:1)	14%	(2:6)	10.0
(more than 100,000 sq. ft., 6 + stories) Office Park (400,000 + sq. ft.)	12/1000 sq.ft., 200/acre* **	1396	(9:1)	1396	(2:8)	
Single Tenant Office	14/1000 sq. ft., 180/a⊏e*	7596	(9:1)	15%	(2:8)	8.8
Corporate Headquarters Government (Civic Center)	7/1000 sq. ft., 110/acre* 30/1000 sq. ft.**	17% 9%	(9:1) (9:1)	16% 12%	(1:9) (3:7)	6.0
Post Office	·		(3.1)		(2,1)	
Central/Welk-In Only Community (not including mail drop tane)	90/1000 sq. ft. * * 200/1000 sq. ft., 1300/acre *	96 84	(6:4)	7% 9%	(5:5)	
Community (w/mail drop tane)	300/1000 sq. ft., 2000/acre*	776	(5:5)	1036	(5:5)	
Mail Drep Lane only	1500 (750 pne-way)/lane*	776	(5:5)	12%	(5:5)	
Department of Motor Vehicles Medical-Dental	180/1000 sq. ft., 900/acro** 50/1000 sq. ft., 500/acre*	696 696	(6:4) (8:2)	70% 71%	(4:6) (3:7)	6.4
·	23.124.11, 235.33.4		,0.2,		,,,,,	
PARKS	50/acre*	43 <u>6</u> 1396	(5:5)	836 936	(5:5)	5.4
Regional (developed)	20/acre*	1072	(0,0)	274	(0.0)	
Neighborhood/County (undeveloped) State (average 1000 acres)	5/acre (add for specific sport uses), 5/picnic site* ** 1/acre, 10/picnic site**					
Amusement (Theme)	BO/acre, 130/acre (summer only)**			66	(6:4)	
San Diego Zoo	115/acre*				` .	
Sea World	BU/scre*					
RECREATION						
Beach, Ocean or Bay[52:39:9] Beach, Lake (fresh water)	600/1000 ft. shoreline, 60/acre* 50/1000 ft. shoreline, 5/acre*					6.3
Bowling Center	30/1000 sq. ft., 300/acre, 30/lane * * 4/campsite * *	736	(7:3)	11%	(4:6)	
Campground	4/cumpsite** 7/acre, 40/hole, 700/course* **	476 796	(8:2)	28 6	(3:7)	
Golf Course Driving Range only	70/acre, 40/hbje, 700/cburse* ** 70/acre, 14/tee box*	376	(7:3)	9%	(5:5)	
Marinas	4/berth, 20/acre* **	396	(3:7)	7%	(6:4)	
Multi-purpose (ministure golf, video arcade, batting cage, etc.) Racquetball/Health Club	90/acre 30/1000 sq. ft., 300/acre, 40/court*	2% 4%	{6:4}	634 534	{5:4}	
Tennis Courts	16/acre, 30/court**	596	(0.1)	1396	(5:5)	
Sports Facilities Outdoor Stadium	50/acre, 0,2/seat*					
Indoor Arena	30/acre, 0.1/seat*					
Racetrack	40/acre, 0.6 seat*	****				
Theaters (multiplex w/matinee)	80/1000 sq. ft., 1.8/seat, 360/screen*	1/296		6 4	(6:4)	6.1
RESIDENTIAL[86:11:3]						7.9
Estate, Urban or Rural (average 1-2 DU/acre)	12/dweiling unit **	696	(3:7)	10%	(7:3)	
Single Family (Intached	10/dwelling unit **	86	(3:7)	10%	(7:3)	
(average 3-6 Dt/scre) Condominium	B/dwelling unit **	B 6	(2:B)	10%	(7:3)	
(or any multi-family 6-20 DU/acre)	_	De	(2:0)	, 1076	(1:3)	
Apartment (or any multi-family units more than 20 DU/acre)	6/dwellingunit**	EP4	{2:B}	53%	(7:3)	
(of any interimine this finite than 20 boracle) Military Housing (off-base, multi-femily) (less than 6 DU/acre)						
(less than 6 DU/acre)	B/dwelling unit	7%	(3:7)	996	(6:4)	
(6-20 DU/acre) Mobile Home	6/dwelling unit	7%	(3:7)	96	(5:4)	
Famûy	5/dwelling unit, 40/acre*	886	(3:7)	11%	(6:4)	
Adults Only Retirement Community	3/dwelling unit, 20/scre* 4/dwelling unit**	916 516	(3:7) (4:6)	1096 796	{6:4} (6:4}	•
Congregate Care Facility	2.5/dwelling unit**	#16 416	(6:4)	E%	(5:4) (5:5)	
RESTAURANT[51:37:12]			-		-	4.7
Quality	100/1000 sq. ft., 3/seat, 500/acre* **	736	(6:4)	es.	(7:3)	4.7
Sit-down, high turnover	160/1000 sq. ft., 6/seat, 1000/acre* **	B6	(5:5)	ED6	(5:4)	
Fast Food (w/ddva-through) Fast Food (without drive-through)	650/1000 sq. ft., 20/seat, 3000/ecre* * * 700/1000 sq. ft. * *	7% 596	(5:5) (6:4)	7% 7%	(5:5) (5:5)	
Delicatessen (7am-4pm)	150/1000 sq. ft., 11/seat*	9%	(6:4)	35	(3:7)	
TRANSPORTATION						
Bus Depat	25/1000 sq. ft.**					
Fruck Terminal Waterport/Marine Terminal	10/1000 sq. ft., 7/bay, 80/acre** 170/berth, 12/acre**	9 6	(4:6)	E6	(5:5)	
Transit Station (Light Rail w/parking)	300/acre, 2 ^{1/2} /parking space (4/occupied)**	1496	(7:3)	15%	(3:7)	
Park & Ride Lots	400/acre (600/paved ecre), 5/parking space (8/accupied) * * *	1496	(7:3)	15%	(3:7)	

^{*} Primary source: San Diego Traffic Generators.

Other sources: TET PTG Generation Report [6th Edition]. This Generation Rates (other agencies and publications), various SANDAG & CALTRANS studies, reports and estimates. Trip category percentage ratios are daily from local household surveys, often cannot be applied to very specific land uses, and do not include non-resident drivers (drief SANDAG Analysis of Trip Diversion, revised November, 1990):

[MINARY - one trip effectly between origin and primary destination.

DIVERTED - linked trip (neving one or more stops along the wey to a primary destination) whose distance compared to divert distance ≥ 1 mile.

PASS-BY- undiverted or diverted < 1 mile.

L Trip lengths are sverage weighted for all trips to end from general land use site. (All trips system-wide average length = 6.9 miles)

Filted curve equation: Ln(T) = 0.502 Ln(x) + 6.945 } T = total trips, x = 1,000 aq. ft.

^{*} Fitted curve equation: 1 = • 2.169 Ln(d) = 12.85 t = trips/DU, d = density (DU/acre), DU = dwelling unit

⁷ Trip Reductions - In order to help promote regional "smart growth" policies, and acknowledge San Diego"s expending mass transit system, consider vehicle trip into tectucions (with proper documentation and necessary adjustments for peak periods). The following are some assimplies:

A 5% daily trip reduction for land uses with transit access or near transit stations accessible within 1/4 mile.

^[2] Up to 10% daily trip reduction for mixed-use developments where residential and commercial retail are combined (demonstrate mode split of walking trips to replace vehicular trips).

APPENDIX E

SR 52 Extension Information

Department of Transportation 4050 Taylor Street San Diego, CA 92110 ph: (619) 688-6670 Fax (619) 688-3695 www.dot.ca.gov/dist11

SeiceRonice7/ (Seel/30Seta)

SAN DIEGO AND IMPERIAL COUNTIES

January 2008

OVERALL GOALS

- Reduce traffic congestion on Interstate 8 and local arterials;
- Increase traffic capacity of the regional transportation system;
- Provide direct access between east county communities and job centers to the west and north; and
- Create a major link in regional transportation network, known as the inner-loop, which consists of State Routes 52 to 125 to 54 back to Interstate 5.

THE PROJECT

The project will construct four miles of four-lane freeway in the city of Santee from State Route 125 (SR-125) to State Route 67. It will include new roadway, bridges, and interchanges at Fanita Drive, Cuyamaca Street and Magnolia Avenue. Currently State Route 52 (SR-52) terminates at SR-125. This extension to the east completes the last segment of the proposed route.

TRAFFIC

The completion of SR-52 to SR-67 is critical in that it provides an important link in regional traffic circulation plans. By the year 2025, the segment will carry approximately 110,000 vehicles a day. It will also reduce some of the heavy traffic burden now carried by adjacent local roads.

ENVIRONMENTAL CONCERNS

The environmental clearance was addressed as part of the Environmental Impact Statement (EIS) prepared and approved for the corridor in 1989. Caltrans has completed an environmental re-evaluation of the project to ensure there are no new significant issues. The FHWA approved the project's reevaluation in November 2006.

FUNDING

The current cost estimate for the project is \$600 million. The right of way portion of that estimate is approximately \$226 million. Programmed funding comes from a number of Federal, State and local sources.

SR-52 is one of the projects identified for funding in the TransNet extension that was recently approved by voters. SANDAG has also identified this as one of the region's TransNet Early Action Projects and a priority for early funding.

SCHEDULE

Right of way acquisition for the portion from SR-125 to Cuyamaca Street has been completed. Acquisition of the required parcels between Cuyamca Street and SR-67 is underway.

Caltrans expects to begin construction on the first stage of the project this month. The second stage is set to begin in May, and the final phase in February 2009. The project should be completed and open to traffic in late 2010.

CONTACT

For more information on this project please contact Project Manager John Rieger at (619) 220-5391 or e-mail at John.Rieger@dot.ca.gov.

APPENDIX F

County of San Diego Table to determine roadway segment capacity.

TABLE 1

AVERAGE DAILY VEHICLE TRIPS

CIRCUL	ATION ELEME ROADS	NT	LEVEL O	F SERVICE		
CLASS	X-SECTION	A	В	C	D.	E
Expressway	126/146	~2C 000	-F1-000	-70 000		
Prime Arterial	102/122	<36,000 <22,200	<54,000	<70,000	<86,000	<108,000
Major Road	78/98	"我们的好人说。""我是一个	<37,000	<44,600	<50,000	. ≺57,000
Collector	70190 64/84	<14,800 <42,700	<24,700	<29,600	<33,400	<37,000
Town Collector	医部门动物 化甲基酚 医克斯勒氏 医二甲二烷 医电池	<13,700	<22,800	<27,400	<30,800	<34,200
· "我,还是我们是我们的时候,我是你们的这些人们的,一点一点,一点有点。" "	54/74	<3,000	<6,000	<9,500	<13,500	<19,000
Light Collector	40/60	<1,900	<4,100	<7,100	<10,900	<16,200
Rural Collector	40/84	<1,900	₹4,100	≤7,100	<10,900	<16,200
Rural Light Collector	40/60	<1,900	<4¦100	<7,100	<10,900	<16,200
Recreational Parkway	40/100	<1,900	<4,100	<7,100	<10,900	<16;200
Rural Mountain	40/100	<1,900	<4,100	≤7,100	<10,900	≼16,20 0
NON—CIRC	ULATION ELE ROADS	MENT	LEVEL O	SERVICE		
CLASS	X-SECTION	A	В	C	D . V	E
Residential Collector	40/60			<4,500	· · · · · · · · · · · · · · · · · · ·	
Residential Road	36/56			<1,500		
Residential Gui-de-sac or Loop Road	32/52		在一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	< 200	•	

^{*}Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

APPENDIX G HCM Analysis

HCS2000: Signalized Intersections Release 4.1f

Analyst: VRPA Technologies

Inter.: Cuyamaca/Town Center Area Type: All other areas Jurisd: San Diego County

Period: AM

Agency: SDC Date: 4/2/07

Year : 2007

Project ID: Existing Peak Hour Traffic

E/W St: Town Center N/S St: Cuyamaca

			SI	GNALI	ZED I	NTERSE	ECTION	SUMM	ARY				
	Eas	stbou	nd	We:	stbou	nd	No	rthbo	und	Soi	uthboi	und	Ī
	I.	T	R	L	T	R	L	${f T}$	R	L	T	R	1
	1			_1			Ī						I
No. Lanes	2	1	1	2	2	1	2	3	1] 2	3	1	_
LGConfig	L	${f T}$	R	L	${f T}$	R	l L	T	R	l L	T	R	-1
Volume	130	19	39	16	37	151	58	317	2	1106	549	249	1
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	112.0	12.0	12.0	ĺ
RTOR Vol			10			38	1		0	1		62	ĺ

Dur	ation	1.00		Area	Type:	Al:	l ot	her	areas						
					Si	gna:	l Op	erat	ions						
Pha	se Combin	ation	1	2	3		4			5	6	7	{	3	
ΕB	Left		A				ŀ	NB	Left	A					
	Thru			Α			1		Thru		Α				
	Right			A			1		Right		A				
	Peds						1		Peds						
WB	Left		A				1	SB	Left	A					
	Thru			Α			- 1		Thru		A				
	Right			Α			1		Right		A				
	Peds						- 1		Peds						
NB	Right						- 1	EB	Right						
SB	Right						- 1	WB	Right						
Gre	en	1	L5.0	32.0)				-	15.0	38.0				
Yel	low	4	1.0	4.0						4.0	4.0				
All	Red	1	L.O	1.0						1.0	1.0				
										O1		L 1.	100 (

Cycle Length: 120.0 secs

		Intersec	tion Pe	erforman	ce Summ	ary	_			
Appr/	Lane	Adj Sat	Rati	los	Lane	Group	Appr	oach		
Lane	•	Flow Rate								
Grp	Capacity	•	V/C	g/C	Delay	LOS	Delay	LOS		
Eastbou	ınd	•			· · · · · · · · · · · · · · · · · · ·					
L	417	3338	0.34	0.13	48.4	D				
T	483	1810	0.04	0.27	32.7	С	44.2	D		
R	422	1583	0.08	0.27	33.0	С				
Westbou	ınd									
L	430	3437	0.02	0.13	46.0	D				
${f T}$	919	3445	0.04	0.27	32.7	С	35.3	D		
R	410	1538	0.30	0.27	35.5	D				
Northbo	und									
L	417	3338	0.15	0.13	47.0	D				
T	1561	4929	0.22	0.32	29.4	С	32.1	С		
R	487	1538	0.00	0.32	28.1	С				
Southbo	und									
L	430	3437	0.27	0.13	47.9	D				
T	1607	5074	0.37	0.32	31.0	С	33.5	С		
R	501	1583	0.41	0.32		С				
	Intersec	tion Delay	= 34.6			nterse	ction	Los =	C	

HCSZUUU: Signalized intersections Release 4.1f

Analyst: VRPA Technologies

500

430

514

1649

Southbound

L

 \mathbf{T}

R

1538

3437

5074

1583

0.00

0.43

0.46

0.44

0.32

0.13

0.32

0.32

Intersection Delay = 37.9 (sec/veh) Intersection LOS = D

27.4

49.2

31.3

32.6

С

D

С

Ç

34.3 C

Inter.: Cuyamaca/Town Center Area Type: All other areas

Agency: SDC Date: 4/2/07

Jurisd: San Diego County

Period: PM Year : 2007

Project ID: Existing Peak Hour Traffic

E/W St: Town Center N/S St: Cuyamaca

			SI	GNALIZ	ED II	NTERSE	CTION	SUMMA	ARY .				
	Ea:	stbou	nd	Wes	tboui	nd	Nor	thbou	ınd	So	uthbo	und	1
	L 	T	R	<u>L</u> 	T	R	L	T	R	l L	T	R	[[
No. Lanes	2	1	1	2	2	1	2	3	1		3	1	<u> </u>
LGConfig	L	T	R	L	${f T}$	R	L	T	R	L	Т	R	İ
Volume	1466	15	153	117	55	192	1220	684	3	170	703	280	ĺ
Lane Width	12.0	12.0	12.0	112.0	12.0	12.0	112.0	12.0	12.0	12.0	12.0	12.0)
RTOR Vol	1		38			48			1			70	1
Duration	1.00		Area	Type:				·-					
D1 0 1 '	······································					Operat	ions						
Phase Combi	natio		2	3	4		T - C+	5	6	7		8	
EB Left		A	A	70.		NB	Left	A	-				
Thru			A	A		1	Thru		A				
Right Peds			A	A		1	Right	-	A				
WB Left		A				I I SB	Peds Left	Α					
Thru		A		A		ם ה	Thru	A	71				
Right				A		1	Right	_	A A				
Peds				А		1	Peds	-	А				
NB Right						l EB	Right	-					
SB Right						WB	Right		٠				
Green		15.0	8.0	18.0		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	213-9110	15.0	39.0	٦			
Yellow		4.0	4.0	4.0				4.0	4.0	•			
All Red		1.0	1.0	1.0				1.0	1.0				
								Cyc	cle Le	ngth:	120.	0 s	secs
		I	nterse	ction	Perf	ormanc	e Sumn			_			
Appr/ Lar	ıe	Ad	j Sat	Ra	tios		Lane	Group	ıqA c	proac	h		
Lane Gro	up	Flo	w Rate										
Grp Cap	acity		(s)	v/c	g.	/C	Delay	7 LOS	Dela	ay LO	S		
Eastbound					_								
L 77	_	33		0.65		.23	43.5	D		_			
T 46	_	18		0.03		.26	33.3	C	41.9	9 D			
R 40	19	15	83	0.31	U	.26	36.3	D					
Westbound	. ^	2.4	7 7	0 04	0	1 2	400	-					
L 43 T 51		34		0.04		.13	46.2	D	E 0 1	- 5			
T 51		34 15		0.12 0.68		.15	44.2	D	52.5	5 D			
Northbound) Т	10	20	υ. υδ	U	.15	56.4	E					
L 41	7	33	30	0.57	Λ	.13	51 <i>A</i>	<i>D</i>					
	502	49		0.46		.13 .32	51.4 31.3	D C	36.2	ת נ			
1 70	J U Z	43	د ع 	0.40	U	. 32	21.3	C	30.2	2 D			

HCS2000: Signalized Intersections Release 4.1f

Agency: SDC Area Type: All other areas
Date: 4/2/07 Jurisd: San Diego County

Period: AM Year : 2007

Project ID: Existing Peak Hour Traffic

E/W St: Mission Gorge N/S St: Cuyamaca

S	TGNALTZED	INTERSECTION	STIMMARY
Ų	TONUTUDE	TM T D I/O D C T T C M	JUMMALI

			SIC	GNALIZ	ZED I	NTERSE	CTION	SUMMA	ARY				
	Ea	stbound	i	Wes	stbou	nd	Noi	thbou	ınd	So	ıthbo	und	
	I., 	T	R	L	T	R	L	T	R	L 	T	R	İ
No. La	ines 2	3	1	i 2	3	1	1 2	2	0	i 2	3	0	—— <u>;</u>
LGConf	iq L	${f T}$	R	L	${f T}$	R	L	TR		L _	TR	_	j
Volume	_	540 2		130	911	86	267	181	37	116	385	51	i
Lane W	lidth 12.0	12.0 1				12.0				12.0			í
RTOR V			8	į		22	i		9			12	í
	·			•			•		_	•			•
Durati	on 1.00	P	rea '			other Operat							
Phase	Combinatio	n 1	2	—	4			5	6	7		8	
	eft	A	_	_	_	NB	Left	Ā	A	•		_	
	ıru		A			1	Thru	**	A	A			
	.ght		A			i	Right	-	A	A			
	eds					i	Peds	-		**			
	eft	A				SB	Left	A					
	ıru	••	A			1	Thru	11		А			
	.ght		A			i	Right	_		A			
	eds		11			1	Peds	-					
	.ght					EB	Right	: A	A				
	.ght					[WB	Right		A				
Green	-9116	14.0	42.0			I MD	Kigii	14.0	8.0	17	Ω		
Yellow	t	4.0	4.0					4.0	4.0	4.			
All Re		1.0	1.0					1.0	1.0	1.			
7777 100		1.0	1.0						cle Le			Λ	secs
		Tnt	erse	ction	Perf	ormanc	e Summ			ig cir.	120.	O	5665
Appr/	Lane	Adj			atios			Group	ורו 🏻 ר	proacl	h		
Lane	Group	Flow		110			munic.	Oloug	, t.b.	JI Oaci	.1		
Grp	Capacity			v/c		/c	Delas	/ LOS	Del:	ay LO			
_							DOTA		50.11	ду 110.			
Eastbo					_								
Ŀ	389	3338		0.34		.12	49.3	D					
\mathbf{T}	1725	4929		0.34		.35	27.3	С	26.9	9 C			
R	976	1583	3	0.19	9 0	.62	10.1	В					
Westbo													
L.	401	3437		0.35		.12	49.4						
${f T}$	1725)		7 0		30.4		31.	7 C			
R	782	1538	}	0.09	9 0	.51	15.2	В					
Northb													
L		3338				.22							
TR	844	3377	7	0.27	7 0	.25	36.4	D	38.3	3 D			
Southb	oound												•
L	401	3437	7	0.31	L O	.12	49.1	D					
TR		5005				.14			50.	4 D	٠		
	Interse	ction [Delay	= 34.	. 8 (sec/ve	h) 3	Inters	section	n LOS	= C		

HCS2000: Signalized Intersections Release 4.1f

Analyst: VRPA Technologies Inter.: Cuyamaca/Mission Gorge

Agency: SDC Area Type: All other areas Date: 4/2/07 Jurisd: San Diego County

Period: PM Year : 2007

Project ID: Existing Peak Hour Traffic
E/W St: Mission Gorge

E/W St: Mi	Lssion	Gorge				N/5	S St: C	Cuyama	ıca				
			SI	GNALIZ	ED II	NTERSE	ECTION	SUMMA	ARY				
	Ea	stbou	nd	Wes	tbou	nd	Nor	thbou	ınd	Sot	ithbo	und	i
	L 	Т	R	L	Т	R	L 	T	R	L 	T	R	ĺ
No. Lanes	2	3	1.	2	3	1	2	2	0	2	3	0	`
LGConfig	L	${f T}$	R	L	${f T}$	R	L	TR		L	TR		i
Volume	323	1068	209	1195	795	139	554	550	142	342	509	85	i
Lane Width	n 12.0	12.0	12.0	12.0			12.0	12.0		12.0			i I
RTOR Vol	1		58	ĺ		22	Í		9			12	i
Duration	1.00		Area	Type:				***************************************	···	TW -			
				Sig	nal (Operat	cions						
Phase Comb	oinatio:	n 1	2	3	4			5	6	7		8	
EB Left		A	Α			NB	Left	A	A				
Thru			A	A			Thru		A	A			
Right			A	A		J	Right		А	A			
Peds						1	Peds						
WB Left		Α				l SB	Left	A					
Thru				A		i	Thru			А			
Right				A		i	Right			A			
Peds				**		i	Peds	•		п			
NB Right						EB	Right	. A	A				
SB Right						WB	Right		1-7				
Green		10.0	8.0	32.0		1 415	11±G11C	15.0	8.0	17	0		
Yellow		4.0	4.0	4.0				4.0		17.			
All Red		1.0	1.0	1.0					4.0	4.0			
HII WEG		1.0	7. • 0	1.0				1.0	1.0	1.0		_	
		т.	.+.~~	ation	Daws				:le Ler	igtn:	120.0	U	secs
7, nn x / T. s							e Summ						
	ane		j Sat		tios		Lane	Group	App	roach	1		
	coup		v Rate			, _							
Grp Ca	apacity	l	(s)	v/c	g/	/ C	Delay	LOS	Dela	y LOS	3		
Eastbound								-					
L 6	540	333	38	0.55	0.	.19	44.8	D					
T 1	.848	492	29	0.63	0.	.38	28.9	C	30.2	: C			
R 1	1029	. 158	33	0.16	0.	. 65	8.3	A					
Westbound													
L 2	286	343	37	0.74	0.	. 08	64.3	E					
	314	492		0.66			40.3		42.5	D			
	566	153		0.19		43	21.1	Ċ		2			
Northbound				-	- •			-					
	779	333	38	0.77	Ω	.23	48.0	D					
	36	334		0.89		25	56.7	E	52.8	D			
Southbound	ì												
	130	343	37	0.87	0.	13	71.1	E					
	705	497		0.90		14	67.6	E	68.9	E			
_													

Intersection Delay = 46.3 (sec/veh) Intersection LOS = D

MCSZUUU: Signalized Intersections Release 4.lt

Analyst: VRPA Technologies Inter.: Cottonwood/Mission Gorge

Agency: SDC Area Type: All other areas Jurisd: San Diego County Date: 4/2/07

Period: AM Year : 2007

Project ID: Existing Peak Hour Traffic

E/W	St: Mis	ssion (Gorge				N/	s st: c	Cottor	boow				
				SI	GNALI.	ZED II	NTERS	ECTION	SUMMA	ARY				
		Ea:	stbour	ıd	. We	stbour	nd	Noi	thbou	ınd	l So	uthbo	und	
		l I	T	R	l L	Т	R	L	T	R	L	T	R	İ
No.	Lanes	i 1	3	0	[1	- 3	0	-¦	1	1	¦		1 .	. !
LGC	onfig	L	\mathtt{TR}		L	TR		Ì	LT	R	İ	LT	Ŕ	İ
Vol	ume	141	577	46	72	1155	16	55	6	58	111	5	39	İ
Lan	e Width	112.0	12.0			12.0		i	12.0		i		12.0	i I
RTO	R Vol	İ		21	İ		4	i		15	İ		10	i
Dur	ation	1.00		Area '				areas						—
T) 1						_	pera	tions_						
	se Combi	Lnatio		2	3	4			5	6	7		8	
EB	Left		A	_			NE		A					
	Thru			A			1	Thru	A					
	Right			A			1	Right	. A					
	Peds		_				!	Peds						
WB	Left		A	_			SE			A				
	Thru			A			[Thru		A				
	Right			A			[Right	-	A				
	Peds						Ţ	Peds						
	Right						EP							
SB	Right						WE	Right						
Gre			14.0	66.0					10.0		_			
	low.		4.0	4.0					4.0	4.0				
All	Red		1.0	1.0					1.0	1.0				
										cle Le	ngth:	120.	0 se	cs
							orman	.ce Sumn	nary		.			
App	r/ Lan	ıe	Adj	, Sat	Ra	atios		Lane	Group	Ар	proac	h		
T.an	e Cro	ביוור	F105	, Pato										

							e reud.	cn: 1	20.0	secs	
		Intersec	tion Pe	erforman	ice Summa	ary					
Appr/	Lane	Adj Sat	Rati	Los	Lane (roup	Appro	oach			_
Lane	Group	Flow Rate									
Grp	Capacity	(s)	v/c	g/C	Delay	T ₁ OS	Delay	LOS			
*		, ,	• -	٠			20201				
Eastbou	ınd										—
L	201	1719	0.22	0.12	48.6	D ·					
TR	2697	4904	0.24	0.55	9.6	A	12.1	В			
Westbou	ind										
Ļ	207	1770	0.38	0.12	50.1	D					
TR	2707	4922	0.47	0.55	11.3	В	13.5	В			
Northbo	ound										
LT	144	1732	0.47	0.08	54.8	D	54.4	D			
R	128	1538	0.37	0.08	53.8	D					
Southbo	ound										
LT	150	1799	0.11	0.08	51.2	D	52.0	D.			
R	132	1583	0.24	0.08	52.4	D					
	Intersec	tion Delay	= 16.0	(sec/v	eh) Ir	nterse	ction 1	Los =	В		

Analyst: VRPA Technologies

Inter.: Cottonwood/Mission Gorge

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: PM

Year : 2007

Peds

| EB Right

| WB Right

Project ID: Existing Peak Hour Traffic

E/W St: Mission Gorge

N/S St: Cottonwood

	SIGN	ALIZED	INTER	SECT	ION	SUMMARY	•		
Eastbound		Westbo	ound	1	No	rthbound	Southbound	T	

						:								
		L	Т	R	l L	T	R	L	T	R	L		T	R
Νo	Lanes		3	0	_	3		_			ļ			
		1 +	_	U	1 1	-	0	l O	Ţ	Τ	1	0	1	1
LGC	onfig	L.	ΤR		L	TR			\mathtt{LT}	R	1		LT	R
Vol		24	1354	86	139	1104	8	75 (6	75	13		8	50
Lan	e Width	12.0	12.0		112.0	12.0		1	12.0	12.0			12.0	12.0
RTO	R Vol	1		21	I		2 .	1 .		19	1			12
Dur	ation	1.00	7.7.1.1	Area	Type:	A11	other	areas						-
							Operat			•				
Pha	se Combi	Ination	า 1	2	3	4	1		5	6		7	{	3
EΒ	Left		A				NB	Left	A					
	Thru			A			1	Thru	A					
	Right			Α			1	Right	A					
	Peds						1	Peds						
WB	Left		A				SB	Left		A				
	Thru			A			1	Thru		A				
	Right			A			1	Right		A				

Peds NB Right SB Right 14.0 63.0 Green Yellow 4.0 4.0 All Red 1.0 1.0

13.0 10.0 4.0 4.0

1.0 1.0

Cycle Length: 120.0 secs

		Intersed	ction Pe	erforman	ce Summa	ary			
Appr/	Lane	Adj Sat	Rati	.os	Lane (Group	Appr	oach	
Lane	Group	Flow Rate							
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	
Eastbou	ınd								
L	201	1719	0.13	0.12	47.8	D			
TR	2574	4902	0.60	0.52	14.7	В	15.3	В	
Westbou	ınd								
L	207	1770	0.20	0.12	48.4	D			
TR	2586	4925	0.47		13.2	В	14.3	В	
Northbo	ound								
LT	187	1730	0.48	0.11	52.2	D	51,7	D	
R	167	1538	0.37	0.11		D	JI, 1	ע	
Southbo		1550	0.37	0.11	J1.0	ט			
LT	151	1808	0.15	0.08	51.5	D	52.5	D	
R	132	1583	0.13	0.08		D D	32.3	ט	
**		tion Delay				_	ction	LOS =	= B

nuszuuu: Signalized intersections Release 4.1f

Analyst: VRPA Technologies

Inter.: Magnolia/Mission Gorge

Agency: SDC Date: 4/2/07

Green

Yellow

All Red

Area Type: All other areas Jurisd: San Diego County

Period: AM Year : 2007

Project ID: Existing Peak Hour Traffic

15.0 43.0

4.0

1.0

4.0

1.0

E/W St: Mission Gorge

N/S St: Magnolia

E/W St: Mis	w St: Mission Gorge					N/S	S St: M	agno.	lia				
			SI	[GNALI:	ZED II	NTERSE	CTION	SUMM	ARY				
	Eas	stbou			tbour			thboi		Soi	uthboi	und	
	l L	T	R	L	\mathbf{T}	R	L	\mathbf{T}	R	L	T	R	İ
No. Lanes	1 2	2	1	 2	2	0	_l	2	1	_ 2	2	<u></u>	-!
LGConfig	1 L	T	R	L	TR	U		T	R		z T	r R	
Volume	1107	357	147	264	871	172	•	445	275	1203	628	149	1
	•				12.0	_ , _			12.0	112.0	12.0		1
RTOR Vol	1		37		12.0	43		12.0	69	1	12.0	37	1
 Duration	1.00		Area	Type:	All	other	areas	······					
				Sig	ınal (Operat	cions						
Phase Combi	nation	n 1	2	3	4			5	6	7	{	8	
EB Left		A				NB	Left	A					
Thru			A				Thru		A				
Right			A				Right		A				
Peds							Peds						
WB Left		A				SB	Left	A					
Thru			A				Thru		A				
Right			A			1	Right		A				
Peds						1	Peds						
NB Right						EB	Right						
SB Right						WB	Right						

Cycle Length: 120.0 SECS

4.0

1.0

15.0 27.0

4.0

1.0

		- .		_	_		.e ьeng	tn:]	.20.0	se	CS
		Intersed			ice Summ	ary					
Appr/	Lane	Adj Sat	Rati	os	Lane	Group	Appr	oach			
Lane	Group	Flow Rate									
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	_		
Eastbou	ınd	1 10/A P 60 t			···	*****					F=
L	417	3338	0.28	0.13	48.0	D					
T	1234	3445	0.31	0.36	26.2	С	30.4	С			
R	567	1583	0.21	0.36	26.9	С		-			
Westbou	ind										
L	430	3437	0.67	0.13	54.1	D				•	
TR	1211	3379	0.90	0.36	44.4	D	46.5	D			
Northbo	ound										
L	417	3338	0.76	0.13	59.3	E					
T	775	3445	0.62	0.22	43.5	D	49.1	D			
R	346	1538	0.65	0.22	46.5	D		-			
Southbo	ound										
L	430	3437	0.51	0.13	50.2	D					
T	798	3547	0.86	0.22		D	51.9	D			
R	356	1583	0.34	0.22	39.6	D		_			
		tion Delay		(sec/v			ction	LOS =	: D		

nuszuuu: Signalized intersections kelease 4.11

Analyst: VRPA Technologies Inte

Inter.: Magnolia/Mission Gorge

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: PM

Year : 2007

Project ID: Existing Peak Hour Traffic

E/W St: Mission Gorge

N/S St: Magnolia

			SI	[GNALI:	ZED I	NTERS	ECTION	SUMM.	ARY				
	Ea:	stbou	nd	Wes	stbou	nd	No:	rthbo	und	Southbound			
	L	${f T}$	R	L	${f T}$	R	L	${f T}$	R	L	T	R	
	1			_1			1						
No. Lanes	1 2	2	1	2	2	0	2	2	1	_ 2	2	1	
LGConfig	L	${f T}$	R	L	TR		L	T	R	L	T	R	
Volume	1166	853	373	233	625	130	371	776	290	1204	470	112	
Lane Width	112.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	
RTOR Vol	1		93	1		32	1		72			28	

Dur	ation	1.00	Area	Type:	All ot	her	areas					
				Si	gnal Op	erat	ions					
Pha	se Combin	nation 1	2	3	4			5	6	7	8	_
EB	Left	A			1	NB	Left	Α	A			
	Thru		A		1		Thru		A	Α		
	Right		A		J		Right		A	A		
	Peds				1		Peds					
WB	Left	A			1	SB	Left	A				
	Thru		A		1		Thru			A		
	Right		A		1		Right			A		
	Peds				1		Peds					
NB	Right				***	EВ	Right					
SB	Right				1	WB	Right					
Gre	en	15	.0 35.	0			_	15.0	8.0	22.0		
Yel	.low	4.0	4.0					4.0	4.0	4.0		
All	Red	1.0	1.0					1.0	1.0	1.0		

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Adj Sat Ratios Lane Group Approach
Lane Group Flow Rate
Grp Capacity (s) v/c g/C Delay LOS Delay LOS

Eastbound

Eastbo	ound								-
L	417	3338	0.43	0.13	49.3	D			
T	1005	3445	0.92	0.29	57.6	E	52.9	D	
R	462	1583	0.66	0.29	40.7	D			
Westbo	ound								
L	430	3437	0.59	0.13	51.7	D			
TR	984	3375	0.80	0.29	43.9	D	45.8	D	
North	oound								
L	779	3338	0.52	0.23	40.7	D			
${f T}$	1005	3445	0.84	0.29	46.4	D	43.3	D	
R	449	1538	0.53	0.29	36.8	D			
South	oound								
L	430	3437	0.52	0.13	50.2	D			
${f T}$	650	3547	0.79	0.18	53.4	D	51.4	D	
R	290	1583	0.31	0.18	43.1	D			
	Interse	ction Delay	$\gamma = 48.1$	(sec/v	eh) In	ters	ection	Los = D	

HCS2000: Signalized Intersections Release 4.1f

Analyst: VRPA Technologies Agency: SDC

Inter.: Magnolia/Prospect Ave Area Type: All other areas Jurisd: San Diego County Year : 2008

Date: 4/2/07 Period: AM

Evicting Book

Project E/W St:	ID: Exis Prospect	ting P Ave	eak H	our T	caffi		s St: N	Jagno	lia				
	-		SI	GNALIZ	ZED T		ECTION						
	Ea	stboun			stbou			thbou		l Soi	ıthbo	und	1
	L	Т	R	L	T	R	L	Т	R	L	Т	R	1
No. Lane	 es 1	2	1				-¦	2					-!
LGConfid	, –	T	R	L	T	R	L	TR	U] 2] L	2 T	1	1
Volume	60			98	599	1134	140	11	141	532	390	R 138	}
Lane Wid	dth 12.0	12.0		-			112.0			12.0			i I
RTOR Vol	l I		1.7	1		284	İ		35			35	i
Duration	1.00	ī	Area '			other							
Dhase Co						Operat	ions_						
EB Left	ombination -	_	2	3	4	•	. ~.	5	6	7	{	3	
Thru		A	Α			NB	Left Thru	A	70.				
Righ			A			1	Right		A				
Peds			n			1	Peds		A				
WB Left		A				i I SB	Left	A					
Thru			A			1	Thru	A	A				
Righ	nt		A			i	Right		A				
Peds						i	Peds		••				
NB Righ	nt					EB	Right	А					
SB Righ	nt	A				WB	Right						
Green		11.0	43.0				-	22.0	24.0)			
Yellow		4.0	4.0					4.0	4.0				
All Red		1.0	1.0					1.0	1.0				
		Tnt	areo	ation	Donf		o C	Сус	le Len	igth:	120.0) se	CS
Appr/	Lane	Adj			tios		e Summ Lane						
	Group	_	Rate	Itta	LIUS		nane	group	Abb	roach			
Grp	Capacity	(5	s)	v/c	g,	/c	Delay	LOS	Dela	y LOS			
Eastbour	nd											·	
L	158	1719	}	0.41	0.	.09	53.2	D					
T	1234	3445	5	0.22	0.	.36	25.2	C	27.9	С			
R	923	1583	3	0.06	0.	. 58	10.8	В					
Westboun													
L	162	1770		0.66		.09	62.7	E					
T	1234	3445		0.53		. 36	28.9	С	24.2	С			
R Northbou	1588	2722	<u>′</u>	0.58	υ.	. 58	16.3	В					
L LIDOU	315	1719	7	Ω 1.4	0	1.0	43.0						
TR	595	2977		0.14 0.21		.18 .20	41.2 40.3	D D	40.5	D			
Southbou	an el							<u> </u>		2			
L L	630	3437	,	0.92	Λ	10	72.0	***					
T	709	3547		0.92		.18 .20	72.0 45.0	E	E "7 4	,			
R	528	1583		0.21		.33	28.9	D C	57.4	E			
•	Intersec					sec/vel			ection	T.OS	D		
			,		- 12		,			поэ	_ D		

HCS2000: Signalized Intersections Release 4.1f

Analyst: VRPA Technologies

Inter.: Magnolia/Prospect Ave

Agency: SDC Date: 4/2/07 Period: PM Area Type: All other areas Jurisd: San Diego County

	d: PM						Ye	ar : 2	8009		·-			
	ct ID: t: Pro			Peak H	our T	raffi		c c+. N	inanal					
E/W 3	C. PIO	spect	Ave				147	S St: M	lagnor	.Ia				
				SI	GNALI	ZED I	NTERS	ECTION	SUMMA	RY				
		Eas	stbour			stbou			thbou		Sou	thbo	und	1
		L	${f T}$	R] L	T	R	L	${f T}$	R	L	${f T}$	R	ĺ
		I]			_1						i
No. I		1	2	1	1	2	2	1 1	2	0	2	2	1	
LGCon	fig	L	T	R	L	${f T}$	R	l L	ΤR	1	Ŀ	${f T}$	R	.
Volum		95	711		1134	488	1222		422	141	945	294	72	1
	Width	12.0	12.0		[12.0	12.0		112.0	12.0		12.0	12.0	12.	0
RTOR	Vol	1		13	1		306	I		35			18	J
 Durat	ion	1.00	······························	Area	Type:	All	other	areas						
							Opera							
Phase	Combi	natio	n 1	2	3	4	_		5	6	7		8	
EB I	eft		A				NB	Left	A					
T	'hru			A			1	Thru			A			
P	ight			A			1	Right			A			
F	'eds							Peds						
WB I	eft		A				SB	Left	A	A				
I	'hru			A			1	Thru		A	Α			
P	ight			A			i	Right	•	A	A			
E	'eds						1	Peds						
NB R	light						EB	Right	. A					
SB R	light		A				WB	Right	. A	A				
Green	i.		13.0	28.0					18.0	13.0	24.	0		
Yello	W		4.0	4.0					4.0	4.0	4.0	İ		
All R	led		1.0	1.0					1.0	1.0	1.0	i		
										le Len	igth:	121.	C	secs
								ce Summ						
Appr/			_	j Sat		atios		Lane	Group	App	roach	l		
Lane	Gro	_		v Rate	**********									
Grp	Cap	acity	Į	(s)	v/c	g.	/c	Delay	LOS	Dela	y Los			
Eastb													· · ·	
L	18		171		0.50		.11	55.0+						
Т	79		344		0.9			86.0		79.5	Ε			
R	66	7	158	33	0.00	5 0	.42	20.9	С					
	ound	_			_	_								
L	19		177		0.77		.11	71.7	E	_				
T	79		344		0.66		.23	44.4	D	31.4	С			
R		52	272	22	0.64	4 0	.57	18.5	В					
	bound	_	4		0.00		3 F		_					
L	25			L9	0.35		.15	47.1	D	F 0 -				
TR	66	వ	334	± Z	0.87	, U	.20	60.1	E	58.3	E			
	, ,													
South														
L	10			37			.30		F					
South L T R	10	31	343 354 158	17	0.26		.35		С	81.7	F			

Intersection Delay = 59.9 (sec/veh) Intersection LOS = E

Analyst: VRPA Technologies

Agency: SDC Date: 4/2/07

Period: AM

Project ID: Existing + Project

E/W St: Town Center

Inter.: Cuyamaca/Town Center
Area Type: All other areas
Jurisd: San Diego County

Year : 2007

N/S St: Cuyamaca

L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T		Eas	stboui	nd	We	stbou	nd	Noi	rthbo	und	So	uthbo	und	1
LGConfig L T R L T R L T R L T R Volume 130 21 39 9 39 152 58 317 6 107 549 249 Lane Width 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0		L	T	R	L	\mathbf{T}	R	L	\mathbf{T}	R	L	Т	R	1
Volume 130 21 39 9 39 152 58 317 6 107 549 249 Lane Width 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	o. Lanes	1 2	1	1	- 2	2	1	-¦2	3	1	-¦2	3	1	-
Lane Width 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	GConfig	L	${f T}$	R	L	${f T}$	R] L	T	R	L	${f T}$	R	i
DEOD 17-1	olume	130	21	39	19	39	152	58	317	6	1107	549	249	i
	ane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	112.0	12.0	12.0	į
KIOK VOI 10 36 2 62	TOR Vol	1		10	1		38	1		2	İ		62	İ

Dur	ation	1.00	Area T	ype: A	ll ot	her	areas					
				Sign	al Op	erat	ions					
Pha	se Combi	nation 1	2	3	4			5	б	7	8	
EB	Left	A				NB	Left	A				
	Thru		A				Thru		A			
	Right		A		1		Right		A			
	Peds				1		Peds					
WB	Left	A			1	SB	Left	A				
	Thru		A		1		Thru		A			
	Right		A		1		Right		A			
	Peds				1		Peds					
NB	Right				1	EΒ	Right					
SB	Right				1	WB	Right					
Gre	en	15.0	32.0				_	15.0	38.0			
Yel	low	4.0	4.0					4.0	4.0			
All	Red	1.0	1.0					1.0	1.0			

Cycle Length: 120.0 secs

		Intersec	tion Pe	erforman	ce Summa	ary				500	
Appr/	Lane	Adj Sat	Rati	os	Lane (Group	Appr	oach			
Lane	Group	Flow Rate				-					
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS			
Eastbou	ind										
I.	417	3338	0.34	0.13	48.4	D					
T	483	1810	0.05	0.27	32.7	С	44.1	D			
R	422	1583	0.08	0.27	33.0	С					
Westbou	ınd										
L	430	3437	0.02	0.13	46.1	D					
${f T}$	919	3445	0.05	0.27	32.7	С	35.4	D			
R	410	1538	0.30	0.27	35.5	D					
Northbo	ound										
L	417	3338	0.15	0.13	47.0	D					
${f T}$	1561	4929	0.22	0.32	29.4	С	32.0	С			
R	487	1538	0.01	0.32	28.1	С					
Southbo	ound										
L	430	3437	0.27	0.13	47.9	D					
${f T}$	1607	5074	0.37	0.32	31.0	С	33.5	С			
R	501	1583	0.41	0.32	32.7	С					
	Intersec	tion Delay	= 34.6	(sec/v	eh) Ir	nterse	ction	LOS =	C		

Analyst: VRPA Technologies

Agency: SDC Date: 4/2/07

Period: PM

Project ID: Existing + Project

Inter.: Cuyamaca/Town Center Area Type: All other areas Jurisd: San Diego County

Year : 2007

E/W St	: Town	Cente	er				N/S	St: 0	Cuyama	ıca				
				STO	SNAT.T 2	it das	TERSE	CTION	SIIMMZ	RΥ				
		East	boun			stbour			thbou			ıthboı	and	
	i ,	L	T	R	, ,, ,, L	T	R	L	T	R	300 L	Т	una R	1
	, , , 	•	•			_	11	44	1	K	ļ <u>1</u>	T	И	i
No. La	nes	2	1	1	1 2	2	1	1 2	3	1	i 2	3	1	'
LGConf	ig :	L	\mathbf{T}	R	L	${f T}$	R	L	${f T}$	R	L	Т	R	1
Volume	4	66 1	L7	153	21	57	193	1220	684	8	172	703	280	ì
Lane W	Midth 1:	2.0 1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	1
RTOR V	ol			38	l		48	1		2	l		70	1
Durati	on 1	.00		Area '	Type:	Δ11 (areas						
Daracr				111			perat							
Phase	Combina	tion	1	2	3	4	1		5	6	7		 8	
EB Le	eft		A	A			NB	Left	A					
Th	ıru			A	A			Thru		A				
Ri	.ght			A	Α		1	Right		A				
Pe	eds							Peds						
WB Le	eft		A				SB	Left	A					
Th	ıru				A		1	Thru		A				
Ri	.ght				A		1	Right		A				
Pe	eds						1	Peds						
NB Ri	.ght						EB	Right						
SB Ri	.ght						WB	Right						
Green			5.0	8.0	18.0)			15.0	39.0)			
Yellow	T	4	1.0	4.0	4.0				4.0	4.0				
All Re	ed	1	0	1.0	1.0				1.0	1.0				
			T	.		~ -		_		le Ler	ngth:	120.0) s	ecs
Appr/	Lane			Sat		Perio tios	ormanc	e Summ		7. m				
Lane	Group		_	Rate	Ne	ILIUS		Talle	Group	App	roach	ì		
Grp	Capac:			s)	v/c	g/	C C	Delay	LOS	Dela	y LOS	}		
Eastbo			222	0	0 65		0.0	42 5	_					
L T	779 469		333		0.65		.23	43.5	D					
R	468 409		181 158		0.04		26	33.4	С	41.9	9 D			
westbo			730	3	0.31	. 0.	26	36.3	D					
L	430		343	7	0.05		13	46.3	Г.					
T	517		344		0.03		15	44.2	D D	52.6	5 D			
R	231		153		0.68		15	56.7	E	JZ. 6	ט ט			
Northb			133	u	0.00	0.	1.0	56.7	£					
L	417		333	Я	0.57		13	51.4	D					
T	1602		492		0.46		32	31.3	C	36.1	. D			
Ř	500		153		0.01		32	27.5	C	20.1				
Southb				_	0.01		~ £	27.0	C					
L	430		343	7	0.43	0	13	49.3	D					
$\overline{\mathtt{T}}$	1649		507		0.46		32	31.3	C	34.4	l C			
R	514			3	0.44		32	32.6	C	U 1 • 1				
		rsect		Delay				h) T		ection	LOS	= D		
				1		- , -	,	, <u>-</u>	~ ~ U			J		

Analyst: VRPA Technologies

Inter.: Cuyamaca/Mission Gorge

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: AM

Year : 2007

Project ID: Existing + Project

E/W St: Mission Gorge

N/S St: Cuvamaca

					4	ca				
			D INTERSE							
	stbound T R	•	bound T R	•	thbou	•		thboi		!
L	1 K	<u>L</u> 	T R	L	${ m T}$	R	L	T	R	
No. Lanes 2	3 1	' I 2	3 1		2	 ¦	2	3	0	¦
LGConfig L	T R	L	T R	L	TR	i	L	TR	J	, I
Volume 126			15 86	267	181	39	116	385	54	í
Lane Width 12.0	12.0 12.0	12.0 1	2.0 12.0	112.0	12.0	i	12.0			i
RTOR Vol	58	l	22	1		10			14	Ì
Duration 1.00	Area '	ľype: A	ll other	areas						
			al Operat	ions						
Phase Combinatio		3	4		5	6	7	8	3	
EB Left	A		NB	Left	A	A				
Thru	A		ļ :	Thru		A	A			
Right	A		· ·	Right	-	A	A			
Peds	_		[Peds						
WB Left	A		SB	Left	A					
Thru	A		ļ	Thru			A			
Right	A			Right			A			
Peds				Peds						
NB Right			EB	Right		A				
SB Right	140 40 0		WB	Right				_		
Green	14.0 42.0				14.0		17.			
Yellow	4.0 4.0				4.0	4.0	4.0			
All Red	1.0 1.0				1.0	1.0	1.0		_	
	Interce	rtion P	erformanc	0 S11mm	Сус	le Len	gth:	120.0)	secs
Appr/ Lane	Adj Sat		ios		Group	Δηη	roach			
Lane Group	Flow Rate	Nac	103	пане	group	App	Luacii			
Grp Capacity		v/c	q/C	Delay	T.OS	Dela	y LOS			
orb odbaorci	(3)	٠, ٥	9,0	Белау	пор	Dera	у пор			
Eastbound	0000		^							
L 389	3338	0.35	0.12	49.4	D					
1705	4000	0.34	11 35				~			
· · · · · · · · · · · · · · · · · · ·	4929		0.35	27.3	C	27.1	С			
R 976	4929 1583	0.19	0.62	27.3 10.1	C B	27.1	C			
R 976 Westbound	1583	0.19	0.62	10.1	В	27.1	C			
R 976 Westbound L 401	1583 3437	0.19	0.62	10.1	B D					
R 976 Westbound L 401 T 1725	1583 3437 4929	0.19 0.36 0.58	0.62 0.12 0.35	10.1 49.4 30.5	B D C	31.8				
R 976 Westbound L 401 T 1725 R 782	1583 3437	0.19	0.62 0.12 0.35	10.1 49.4 30.5	B D					
R 976 Westbound L 401 T 1725 R 782 Northbound	1583 3437 4929 1538	0.19 0.36 0.58 0.09	0.62 0.12 0.35 0.51	10.1 49.4 30.5 15.2	B D C B					
R 976 Westbound L 401 T 1725 R 782 Northbound L 751	1583 3437 4929 1538 3338	0.19 0.36 0.58 0.09	0.62 0.12 0.35 0.51	10.1 49.4 30.5 15.2 39.8	B D C B	31.8	С			
R 976 Westbound L 401 T 1725 R 782 Northbound L 751	1583 3437 4929 1538	0.19 0.36 0.58 0.09	0.62 0.12 0.35 0.51	10.1 49.4 30.5 15.2 39.8	B D C B		С			
R 976 Westbound L 401 T 1725 R 782 Northbound L 751 TR 843	1583 3437 4929 1538 3338 3373	0.19 0.36 0.58 0.09 0.39 0.27	0.62 0.12 0.35 0.51 0.22 0.25	10.1 49.4 30.5 15.2 39.8 36.4	B C B D	31.8	С			
R 976 Westbound L 401 T 1725 R 782 Northbound L 751 TR 843 Southbound	1583 3437 4929 1538 3338 3373	0.19 0.36 0.58 0.09 0.39 0.27	0.62 0.12 0.35 0.51 0.22 0.25	10.1 49.4 30.5 15.2 39.8 36.4	B D C B D D	31.8	C			
R 976 Westbound L 401 T 1725 R 782 Northbound L 751 TR 843	1583 3437 4929 1538 3338 3373	0.19 0.36 0.58 0.09 0.39 0.27	0.62 0.12 0.35 0.51 0.22 0.25	10.1 49.4 30.5 15.2 39.8 36.4	B D C B D D	31.8	C			

Analyst: VRPA Technologies

Inter.: Cuyamaca/Mission Gorge

Agency: SDC Area Type: All other areas Date: 4/2/07 Jurisd: San Diego County

Year : 2007

Period: PM

Project ID: Existing + Project

E/W St: Mission Gorge

N/S St: Cuyamaca

E/W S	t: Mis	sion (Gorge				N/S	3 St: (Cuyama	aca				
				SI	GNALI	ZED I	NTERSE	ECTION	SUMMA	ARY				
		Ea:	stbou	nd	Wes	stbou	nd	No:	rthbou	ınd	Sou	thbo	und	
		L	Т	R	L	T	R	L	T	R I	L	Т	R	Ţ
No. L	anes		3	1	 	3	1	-¦2	2	ˈ	2	3	0	I
LGCon	fig	L	${f T}$	R	L	${f T}$	R	L	TR	j	L	TR		ĺ
Volum	e	328	1075	209	197	801	139	554	550	144	342	509	80	ĺ
Lane '	Width	12.0	12.0		112.0	12.0	12.0	12.0	12.0	l	12.0	12.0		
RTOR '	Vol	1		52	l		35	I		36			20	1
Durat	ion	1.00		Area '				areas						
				·····			Operat	ions						
	Combi	natio		2	3	4			5	6	7	8	8	
	eft		Α	A			NB	Left	A	A				
	hru			A	A			Thru		A	A			
	ight			A	A		1	Right	Ξ.	А	A			
	eds						į	Peds						
	eft -		Α				SB	Left	A					
	hru				A		1	Thru			A			
	ight				A		1	Right	-		A			
	eds						1	Peds						
	ight						EB	Right		A				
	ight						WB	Right						
Green	1		11.0	5.0	33.0)			15.0		18.			
Yello			4.0	4.0	4.0				4.0	4.0	4.0			
All R	ea		1.0	1.0	1.0				1.0	1.0	1.0			
			.	_ •				_		le Len	igth:	120.0)	secs
7/	T 0.0			nterse			ormanc				· ,		···	
Appr/			_	j Sat	Кā	itios		Lane	Group	App	roach	l		
Lane	Gro	-		v Rate			/ / / / / / / / / /	D = 1 = -	- T O O					
Grp	Сар	acity	1	(s)	v/c	g,	/c	ретаў	/ LOS	рета	y LOS	i		
Eastb														
L	60		343		0.61		.17	47.3	D					
T	18		507		0.66		.36	33.1	C	33.7	C			
R	10	U3	158	33	0.17	U	. 63	9.1	A					
Westbo		E	24-	דיי ר	0 70		0.0	E0 0	_					
T	31		343		0.70		.09	59.0	E	40.0	_			
	13			74	0.64		.28	39.1		40.9	D			
R North	69	9	126	33	0.17	· O	. 44	20.3	С					
L	bouna 80.	2	212	2 "7	0 77		22	47 0	1					
TR	80. 89		343		0.77		. 23	47.2	D	η.···) · ·	-			
TIV	09	73	345	59	0.82	. 0.	.26	47.6	D	47.4	D			
South		_	_											
L	43			37			.13							
TR	7 4	9	499	3 4	0.85	0.	. 15	58.3	E	63.8	E			
	In	tersed	ction	Delay	= 44.	6 (s	sec/ve	h) I	inters	ection	LOS	= D		

Analyst: VRPA Technologies

Inter.: Cottonwood/Mission Gorge

Agency: SDC Date: 4/2/07 Area Type: All other areas Jurisd: San Diego County

Year : 2007

Period: AM

Project ID: Existing + Project

E/W St: Mission Gorge

N/S St: Cottonwood

				O INTERSE				····		
	•	stbound		oound	•	hboun	•		thbo	•
	L 	T R	L :	r R	L	Т	R	L	Т	R I
No. Lan	es 1	3 0	i 1	3 0	-i	1	1 '	0	1	'
LGConfi	g L	TR	L	TR	Ì	LT	R I		LT	R j
Volume	48	577 46	172 13	155 22	155 6	5 5	8 [15	5	45
Lane Wi			12.0 12	2.0		12.0 1	•		12.0	12.0
RTOR Vo	1	12	1	6	1	1	.5			11
Duratio	n 1.00	Area		ll other						
Phase C	ombinatio	n 1 2	srgne	al Operat 4 I	Tons	5	6	7		 3
EB Lef		A	-	l NB	Left	A	Ü	•	`	•
Thr	u	A		i	Thru	A				
Rig	ht	A		İ	Right	A				
Ped	s			1	Peds					
WB Lef	t	A		SB	Left		A			
Thr		A			Thru		A			
Rig		А		l	Right		A			
Ped				1	Peds					
NB Rig				EB	Right					
SB Rig	ht			WB	Right					
Green		14.0 66.0				10.0	10.0			
Yellow All Red		4.0 4.0				4.0	4.0			
AIT Keu		1.0 1.0				1.0	1.0 e Lend	ath.	120 () secs
		Interse	ction Pe	erformanc	e Summa		С ДСП	9 (11.	120.0	5605
Appr/	Lane	Adj Sat	Rati			Froup	App:	roach		
Lane	Group									
	o r o u p	Flow Rate				_				
Grp	Capacity	Flow Rate (s)	v/c	g/C	Delay	LOS	Dela	y LOS		
Grp ————— Eastbou	Capacity			g/C		LOS	Delay	y LOS		104-4-0 //
	Capacity			g/C 0.12		LOS	Dela	y LOS		NA 474 (1 4 Access 1)
Eastbou	Capacity nd	(s)	v/c		Delay		Delay	y LOS B		10 500 A Ann
Eastbou L TR	Capacity nd 201 2693	(s) 1719	v/c 0.26	0.12	Delay	D				
Eastbou L	Capacity nd 201 2693 nd	(s) 1719 4896	v/c 0.26 0.25	0.12 0.55	Delay 49.0 9.6	D A				
Eastbou L TR Westbou	Capacity nd 201 2693	(s) 1719 4896 1770	0.26 0.25	0.12 0.55	Delay 49.0 9.6	D				
Eastbou L TR Westbou L	Capacity 201 2693 nd 207 2705	(s) 1719 4896 1770	0.26 0.25	0.12 0.55	Delay 49.0 9.6	D A D	12.5	В		
Eastbou L TR Westbou L TR	Capacity nd	1719 4896 1770 4919	0.26 0.25 0.38 0.47	0.12 0.55 0.12 0.55	Delay 49.0 9.6 50.1 11.3	D A D B	12.5	В		
Eastbou L TR Westbou L TR Northbo	Capacity nd	1719 4896 1770 4919	0.26 0.25 0.38 0.47	0.12 0.55 0.12 0.55	Delay 49.0 9.6 50.1 11.3	D A D B	12.5	В		
Eastbou L TR Westbou L TR Northbo	Capacity nd	1719 4896 1770 4919	0.26 0.25 0.38 0.47	0.12 0.55 0.12 0.55	Delay 49.0 9.6 50.1 11.3	D A D B	12.5	В		
Eastbou L TR Westbou L TR Northbo	Capacity nd	1719 4896 1770 4919	0.26 0.25 0.38 0.47	0.12 0.55 0.12 0.55	Delay 49.0 9.6 50.1 11.3	D A D B	12.5	В		
Eastbou L TR Westbou L TR Northbo	Capacity nd	1719 4896 1770 4919	0.26 0.25 0.38 0.47	0.12 0.55 0.12 0.55	Delay 49.0 9.6 50.1 11.3	D A D B	12.5 13.5 54.4	В		
Eastbou L TR Westbou L TR Northbo LT R Southbo	Capacity 201 2693 nd 207 2705 und 144 128 und 150 132	1719 4896 1770 4919 1732 1538	0.26 0.25 0.38 0.47 0.47 0.37	0.12 0.55 0.12 0.55 0.08 0.08	Delay 49.0 9.6 50.1 11.3 54.8 53.8	D A D B	12.5	B B		
Eastbou L TR Westbou L TR Northbo LT R Southbo	Capacity 201 2693 nd 207 2705 und 144 128 und 150 132	(s) 1719 4896 1770 4919 1732 1538	0.26 0.25 0.38 0.47 0.47 0.37	0.12 0.55 0.12 0.55 0.08 0.08	Delay 49.0 9.6 50.1 11.3 54.8 53.8	D A D D D D D	12.5 13.5 54.4	B B		

Agency: SDC Area Type: All other areas Date: 4/2/07 Jurisd: San Diego County

Period: PM Year : 2007

Project ID: Existing Peak Hour Traffic

E/W St: Mission Gorge N/S St: Cottonwood

		SI	GNALIZED	INTERSE	CTION SUMM	ARY		
		stbound	Westb	ound	Northboo	ınd	Southbour	id
	L 	T R	L T	R	L T	R	L T	R
No. Lan	ies 1	3 0	i 1	3 0	i 0 1	i	0 1	1 i
LGConfi	.g L	TR	L	TR	LT	R į	LT	R
Volume	33	1354 86	39 11	04 15	175 6	75	19 8 5	8 j
Lane Wi			12.0 12	.0	12.0	12.0	12.0 1	2.0
RTOR Vo)1	22	1	4	1	19	1	5 J
Duratio	n 1.00	Area		l other l Operat		··········		
Phase C	ombination	1 1 2	3	4	5	6	7 8	
EB Lef		A	_	I NB	Left A	Ū	, 0	
Thr	·u	A		i	Thru A			
Rig	ht	А		İ	Right A			
Ped	ls			j	Peds			
WB Lef	t	A		SB	Left	A		
Thr		A		ı	Thru	Α		
Rig		A		1	Right	A		
Ped				1	Peds			
NB Rig				EB	Right			
SB Rig	ht			WB	Right			
Green		14.0 63.0			13.0			
Yellow		4.0 4.0			4.0	4.0		
All Red		1.0 1.0			1.0	1.0		
		T				cle Len	gth: 120.0	secs
Appr/	Lane	Interse	Rati		e Summary	7\	roach	
Lane	Group	Flow Rate	Vafi	US	Lane Group	, App	roach	
Grp	Capacity	(s)	v/c	g/C	Delay LOS	Dolo	y LOS	
		(3)			Deray 103	рета	у тов	
Eastbou								
L	201	1719	0.18	0.12	48.2 D			
TR	2574	4902	0.60	0.52	14.7 B	15.5	В	
Westbou	nd							
Westbou L	nd 207	1770	0.20	0.12	48.4 D			
		1770 4922				14.4	В	
L	207 2584					14.4	В	
L TR Northbo	207 2584 und	4922	0.47	0.52	13.2 В			
L TR	207 2584	4922 1730	0.47	0.52	13.2 B 52.2 D	14.4 51.7		
L TR Northbo	207 2584 und 187 167	4922	0.47	0.52	13.2 B 52.2 D			
L TR Northbo LT R Southbo	207 2584 und 187 167	4922 1730 1538	0.47 0.48 0.37	0.52 0.11 0.11	13.2 B 52.2 D 51.0 D	51.7	D	
L TR Northbo LT R	207 2584 und 187 167 und	4922 1730 1538 1800	0.47 0.48 0.37	0.52 0.11 0.11	13.2 B 52.2 D 51.0 D		D	
L TR Northbo LT R Southbo	207 2584 und 187 167 und 150 132	4922 1730 1538	0.47 0.48 0.37 0.20 0.36	0.52 0.11 0.11 0.08 0.08	13.2 B 52.2 D 51.0 D 51.9 D 53.6 D	51.7	D D	

Analyst: VRPA Technologies

3

Inter.: Magnolia/Mission Gorge

Agency: SDC Date: 4/2/07 Area Type: All other areas Jurisd: San Diego County

Period: AM

Т

798

3547

1583

0.87

0.34

0.22

0.22

Intersection Delay = 46.6 (sec/veh) Intersection LOS = D

55.9

39.6

E

D

52.8 D

Year : 2007

Project ID: Existing + Project

E/W St: Mission Gorge

N/S St: Magnolia

E/W St:	Miss	sion (Gorge				N/S	S St: M	[agno]	lia			
				SI	GNALI	ZED I	NTERSE	ECTION	SUMMA	ARY			
		Ea	stbour	nd	Wes	stbou	nd	Nor	thbou	ınd	l So	uthbo	und
		L	T.	R	L	Т	R	L	T	R	L	Т	R I
No. Lane	s	2	2	1	i 2	2	0	- i <u>-</u> 2	2	1	i	2	1 1
LGConfid	r i	L	Т	R	L	TR		L	Т	R	<u>L</u>	T	R
Volume		107	360		264	875	176	295	456		206	637	149
Lane Wid	lth	12.0	12.0		112.0			112.0			112.0		12.0
RTOR Vol				37	ĺ		44	ĺ		69	İ		37 j
Duration	1	1.00		Area			other Operat						
Phase Co	mhir	natio	n 1	2	3	J.1101 4		.10113	5	6	7		8
EB Left			A A	۷	J	4	I I NB	Left	A	Ð	/	•	Ü
Thru			A	A			1 1/17	Thru	A	7\			
Righ				A			I I	Right		A			
Peds				А			I I	-	•	A			
WB Left			A				1 00	Peds	71				
ws Leru Thru			H	70.			SB	Left	A	70.			
				A			1	Thru		A			
Righ				A			1	Right	-	A			
Peds							!	Peds					
NB Righ							l EB	Right					
SB Righ	nt						WB	Right					
Green			15.0	43.0					15.0)		
Yellow			4.0	4.0					4.0	4.0			
All Red			1.0	1.0					1.0	1.0			
			Tr	nterse	ction	Perf	ormano	e Summ		:le Lei	ngth:	120.	0 sec
Appr/	Lane			; Sat		atios		Lane		Αρι	proacl	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	Grou			v Rate					01.001	,	, Louci	•	
Grp		acity		(s)	v/c	g	/ c	Delay	LOS	Dela	ay LO	3	
Eastbour	 1d											·····	
L	417	7	333	38	0.28	3 0	.13	48.0	D				
\mathbf{T}	123		344		0.32		.36	26.2	C	30.4	4 C		
R	567		158		0.23		.36	26.9			,		
Westbour						_			-				
L)	343	37	0.67	7 0	.13	54.1	D				
TR			337				.36			47.2	2 D		
Northbou	ind												
L	417	7	333	38	0.77	7 0	.13	59.9	E				
Т	775		344		0.64		.22		D	49.4	4 D		
R	346		153		0.65		.22	46.5	D				
Southbou				-	50	J			_				
L	430)	343	37	0.52	2 n	.13	50.3	D				
_	100	`	24.		0.02	- 0		50.5					

Analyst: VRPA Technologies

Inter.: Magnolia/Mission Gorge

Agency: SDC

Area Type: All other areas Jurisd: San Diego County

Date: 4/2/07

Year : 2007

Period: PM

Project ID: Existing + Project

	. 111.5	sion (Jorge				.,, .	S St: N	iagno.	lia				
				si				CTION						
		Eas	stbour			tboui			thbou	ınd	Sou	ıthboı	und	Ţ
		l L I	T	R	L 	Т	R	L	Т	R	L 	Т	R	
No. Lan	nes	2	2	1	2	2	0	1 2	2	1	1 2	2	1	;
LGConfi	-	L	${f T}$	R	L	TR		L	T	R	L	${f T}$	R	1
Volume		1166	857		233	630	135	373	790	290	1208	482	112	****
Lane Wi	idth	[12.0	12.0	12.0	12.0	12.0		112.0	12.0	12.0	12.0	12.0	12.	0
RTOR Vo	o 1	Į.		94	}		34	1		73	1		28	1
Duratio	on	1.00		Area '				areas						
Dhage C	- ambi						Operat	ions			_			
Phase C		na C101		2	3	4		T £ L	5	6	7	;	8	
EB Lef			Α	77.			NB	Left	A	A	-			
Thr				A			1	Thru		A	A			
Rig	-			A				Right	-	A	A			
Ped			-				1	Peds	_					
WB Lef			A	_			SB	Left	A					
Thr				A			1	Thru			A			
Rig	-			A			ļ	Right	-		A			
Ped							ļ	Peds						
NB Rig	_						EB	Right						
CH Dir	iht.							73 - 1 - 1						
_	,						WB	Right						
Green	,	,	15.0	35.0			WB	Kignt	15.0		22.			
Green Yellow		•	4.0	4.0			l MR	Kight		8.0 4.0	22. 4.0		· ·	
Green Yellow		•					l MR	кignt	15.0 4.0 1.0	4.0 1.0	4.0 1.0))		
Green Yellow		•	4.0	4.0 1.0	ation	Dorf			15.0 4.0 1.0 Cyc	4.0 1.0 cle Le	4.0 1.0))		secs
Green Yellow All Red	i	, 	4.0 1.0	4.0 1.0 nterse			ormanc	e Sumn	15.0 4.0 1.0 Cyc nary	4.0 1.0 :le Le	4.0 1.0 ngth:) 120.	0 	secs
Green Yellow All Red Appr/	l Lane		4.0 1.0	4.0 1.0 ntersed	Rē	Perfo tios	ormanc		15.0 4.0 1.0 Cyc nary	4.0 1.0 :le Le	4.0 1.0) 120.	0	secs
Green Yellow All Red Appr/ Lane	l Lane Grow	цр	4.0 1.0 Ir Ad	4.0 1.0 ntersed j Sat w Rate	R a	tios	ormanc	e Summ Lane	15.0 4.0 1.0 Cyc ary_ Group	4.0 1.0 cle Le	4.0 1.0 ngth: proach) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp	Lane Grow Capa		4.0 1.0 Ir Ad	4.0 1.0 ntersed	Rē	tios	ormanc	e Sumn	15.0 4.0 1.0 Cyc ary_ Group	4.0 1.0 cle Le	4.0 1.0 ngth:) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp	Lane Grow Capa	up acity	4.0 1.0 Ir Ad	4.0 1.0 ntersed j Sat v Rate (s)	R€ √/c	tios g,	ormanc /C	e Summ Lane Delay	15.0 4.0 1.0 Cycury_ Group	4.0 1.0 cle Le	4.0 1.0 ngth: proach) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou	Lane Grow Capa and 41	up acity 7	4.0 1.0 Ir Add Flow	4.0 1.0 ntersed j Sat w Rate (s)	v/c 0.43	g,	ormano /C	Ee Summ Lane Delay	15.0 4.0 1.0 Cycurry_ Group LOS	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou	Lane Grow Capa and 41	up acity 7 05	4.0 1.0 Ir Ad Flow	4.0 1.0 ntersed j Sat w Rate (s)	0.43	g,	ormanc /C .13 .29	E Summ Lane Delay	15.0 4.0 1.0 Cycurry_ Group LOS	4.0 1.0 cle Le	4.0 1.0 ngth: proach) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou L	Lane Grow Capa and 41 100 462	up acity 7 05	4.0 1.0 Ir Add Flow	4.0 1.0 ntersed j Sat w Rate (s)	v/c 0.43	g,	ormano /C	Ee Summ Lane Delay	15.0 4.0 1.0 Cycurry_ Group LOS	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou L T R	Lane Grow Capa and 41 100 462	up acity 7 05 2	4.0 1.0 Ir Ad Flow 333 344 158	4.0 1.0 ntersed j Sat v Rate (s)	0.43 0.93 0.66	g, 3 0, 5 0,	.13 .29	Lane Delay 49.3 58.8 40.8	15.0 4.0 1.0 Cyc ary_ Group LOS D E D	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou L R R Westbou	Lane Grow Capa ind 417 462 ind 430	ap acity 7 05 2	4.0 1.0 Ir Add Flow 333 344 158	4.0 1.0 ntersed j Sat w Rate (s) 	0.43 0.93 0.66	g, 3 0, 5 0, 6 0,	.13 .29 .13	Lane Delay 49.3 58.8 40.8	15.0 4.0 1.0 Cyc ary_ Group LOS D E D	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach ay LOS) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou L R R Westbou	Lane Grow Capa and 41 100 462	ap acity 7 05 2	4.0 1.0 Ir Ad Flow 333 344 158	4.0 1.0 ntersed j Sat w Rate (s) 	0.43 0.93 0.66	g, 3 0, 5 0, 6 0,	.13 .29	Lane Delay 49.3 58.8 40.8	15.0 4.0 1.0 Cyc ary_ Group LOS D E D	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach ay LOS) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou L T R Westbou L	Lane Grow Capa Ind 41 100 462 Ind 430 984	ap acity 7 05 2	4.0 1.0 Ir Add Flow 333 344 158	4.0 1.0 ntersed j Sat w Rate (s) 	0.43 0.93 0.66	g, 3 0, 5 0, 6 0,	.13 .29 .13	Lane Delay 49.3 58.8 40.8	15.0 4.0 1.0 Cyc ary_ Group LOS D E D	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach ay LOS) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou L T R Westbou L TR Northbo	Lane Grow Capa Ind 41 100 462 Ind 430 984	up acity 7 05 2	4.0 1.0 Ir Add Flow 333 344 158	4.0 1.0 ntersed j Sat w Rate (s) 	0.43 0.93 0.66 0.59	g, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.13 .29 .13	Lane Delay 49.3 58.8 40.8	15.0 4.0 1.0 Cyc ary_ Group LOS D E D	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach ay LOS) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou L T R Westbou L TR Northbo	Lane Grow Capa and 417 100 462 and 430 984	ap acity 7 05 2 0	4.0 1.0 Ir Add Flow 333 344 158 343 337	4.0 1.0 ntersed j Sat w Rate (s) 	0.43 0.93 0.66 0.59	g, 3 0, 6 0, 7 0, 9 0, 9 0, 9 0, 9 0, 9 0, 9 0, 9 0, 9	.13 .29 .13	Pelay 49.3 58.8 40.8	15.0 4.0 1.0 Cyc ary_ Group LOS D E D D	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach ay LOS 7 D) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou L T R Westbou L TR Northbo	Lane Grow Capa and 417 462 and 430 984 ound 779	ap acity 7 05 2 0 4	4.0 1.0 Ir Add Flow 333 344 158 343 337	4.0 1.0 ntersed j Sat v Rate (s) 	0.43 0.93 0.66 0.59	g,	.13 .29 .13 .29	Delay 49.3 58.8 40.8	15.0 4.0 1.0 Cyc ary_ Group TOS D E D D D	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach ay LOS 7 D) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou L T R Westbou L TR Northbo	Lane Grow Capa 100 462 100 984 5und 779 100 449	ap acity 7 05 2 0 4	4.0 1.0 Ir Ad Flow 333 344 158 343 337	4.0 1.0 ntersed j Sat v Rate (s) 	0.43 0.93 0.66 0.59 0.81	g,	7C .13 .29 .29 .13	Delay 49.3 58.8 40.8 51.7 44.4	15.0 4.0 1.0 Cyc nary_ Group TOS D E D D D D	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach ay LOS 7 D) 120.(0	secs
_	Lane Grow Capa 100 462 100 984 5und 779 100 449	ap acity 7 05 2 0 4	4.0 1.0 Ir Ad Flow 333 344 158 343 337	4.0 1.0 ntersed j Sat w Rate (s) 	0.43 0.93 0.66 0.59 0.81	g, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7C .13 .29 .29 .13	Delay 49.3 58.8 40.8 51.7 44.4	15.0 4.0 1.0 Cyc nary_ Group TOS D E D D D D	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach ay LOS 7 D) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou L T R Westbou L TR Northbo	Lane Grow Capa and 417 100 462 and 779 100 449	ap acity 7 05 2 0 4	4.0 1.0 Ir Add Flow 333 344 158 343 344 153	4.0 1.0 ntersed j Sat w Rate (s) 	0.43 0.93 0.66 0.59 0.81	g, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.13 .29 .13 .29	49.3 58.8 40.8 51.7 44.4	15.0 4.0 1.0 Cyclary_ Group LOS D D D D D	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach ay LOS 7 D) 120.(0	secs
Green Yellow All Red Appr/ Lane Grp Eastbou L T R Westbou L TR Northbo	Lane Grow Capa Ind 417 100 462 Ind 779 100 449 Dund 430	up acity 7 05 2 0 4 9 05 9	4.0 1.0 Ir Add Flow 333 344 158 343 344 153	4.0 1.0 ntersed j Sat w Rate (s) 	0.43 0.93 0.66 0.59 0.81 0.53 0.53	g, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.13 .29 .13 .29	49.3 58.8 40.8 51.7 44.4	15.0 4.0 1.0 Cyc Group Group D D D D D D D	4.0 1.0 cle Les Dela	4.0 1.0 ngth: proach ay LOS 7 D) 120.(0	secs

Agency: SDC Area Type: All other areas Date: 4/2/07 Jurisd: San Diego County

Period: AM Year : 2007

Project ID: Existing Plus Project AM Peak Hour

E/W St: Prospect Ave N/S St: Magnolia

	Eas	stbour	nd	Wes	stbou	nd	Nor	rthboi	ınd	Soi	ıthboı	ınd	
	l T	T	R	L	T	R	L	T	R	l L	T	R	
No. Lanes	1	2	1	_	2	2	_	2		¦	2	1	
LGConfig	L	T	R	l L	${f T}$	R	L	TR		L	T	R	ĺ
Volume	160	246	67	198	599	1147	40	11	38	842	390	138	-
Lane Width	112.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	
RTOR Vol	3		17	1		287	1		35	1		35	

Dur	ation	1.00	Area :	rype: <i>F</i>	TTT OF	ner	areas					
				Sigr	al Op	erat	ions					
Pha	se Combi	nation 1	2	3	4			5	6	7	8	
EB	Left	A			j	NB	Left	A				
	Thru		A		1		Thru		A			
	Right		A				Right		A			
	Peds				1		Peds					
WB	Left	A			1	SB	Left	A				
	Thru		A				Thru		A			
	Right		A				Right		A			
	Peds						Peds					
NВ	Right					EB	Right	A				
ŚB	Right	A			J	WB	Right	Α				
Gre	en	15.0	35.0					33.0	17.0			
Yel	low	4.0	4.0					4.0	4.0			
All	Red	1.0	1.0					1.0	1 0			

Cycle Length: 120.0 secs

		Intersec	ction Pe	rforman	ce Summa	ary			
Appr/	Lane	Adj Sat	Rati	os	Lane (Group	Appr	oach	
Lane	Group	Flow Rate							_
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	· _
							•		
Eastbou	ind								
L	215	1719	0.30	0.13	48.5	D			
${f T}$	1005	3445	0.27	0.29	32.5	С	32.0	С	
R	963	1583	0.06	0.61	9.6	A			
Westbou	ınd								
L	221	1770	0.48	0.13	50.6	D			
T	1005	3445	0.65	0.29	38.3	D	25.9	С	
R	1656	2722	0.56	0.61	14.5	В			
Northbo									
L	473	1719	0.09	0.28	32.4	С			
TR	473	3342	0.03	0.14	44.4	D	35.5	D	
Southbo	ound								
L	945	3437	0.97	0.28	77.4	E			
T	502	3547	0.84	0.14		E	70.0	E	
R	488	1583	0.23	0.31		c			
		tion Delay				-	ection	LOS =	D

Analyst: VRPA Technologies Inter.: Magnolia/Prospect Ave Agency: SDC Area Type: All other areas Jurisd: San Diego County

Period: PM Year : 2008

Project ID: Existing + Project Peak Hour Traffic

		ID: Exist Prospect		· Proj	ect Pe	eak H		raffic S St: N	lagno l	lia				
,				C T (ጉእን አያ ተባ	א הואל		ECTION	-					
		l Ear	stbour			stbou			thbou			ıthbo	und	
		L	T	R	L	т Т	R R	I L	Т	R I	l L	Т		1
		1,1	Ŧ	K	 11	1	K	 T	1	K	Ь	1	R	l I
No.	Lane	s 1	2	1	1 1	2	2	1	2	0	2	2	1	'
LGCo	nfig	_ L	T	R	L	${f T}$	R] L	TR		L	Т	R	i
Volu	me	95	711	53	134	488	1238	183	422	141	959	294	72	İ
Lane	. Wid	th 12.0	12.0	12.0	12.0	12.0	12.0	112.0	12.0	j	12.0	12.0	12.0	Ì
RTOR	Vol			13			309	1		35			18]
Dura	tion	1.00		Area '			other							
							Operat	cions						
		mbinatio		2	3	4		.	5	6	7		8	
	Left		A	_			l NB	Left	A		_			
	Thru			A			l	Thru			A			
	Righ			A			!	Right	:		A			
	Peds		-					Peds	_					
	Left		A	_			SB	Left	A	A	_			
	Thru			A			ŀ	Thru		A	A			
	Righ			A			l 1	Right	-	A	A			
	Peds							Peds	-					
	Righ		70.				EB	Right		7				
	Righ	. L	A 13.0	20 0			WB	Right		A.		0		
Gree Yell			4.0	28.0 4.0					18.0					
All			1.0	1.0					4.0	4.0	4.0			
HII	Keu		1.0	1.0					1.0	1.0	1.0			
			Τr	toreo	ation	Dorf	0 rm 1 n 0	e Sumn		cle Ler	ig tii :	120.	U SE	ecs
Appr	. /	Lane		Sat		atios			Group	- Ann	roach	· ····································		
Lane		Group		Rate	I/C	16.1.03		папе	Group	, Abi	or Gaci	L		
Grp		Capacity		s)	v/c		<u>/c</u>	Delas	, LOS		y LOS	• · · · · · · · · · · · · · · · · · · ·		
<u></u>			<u>'</u>		· · · · · · · · · · · · · · · · · · ·	9	, с	Deray	, 1102	Dere	ту дос	,		
East	boun			_										
Ŀ		186	171		0.55		.11	54.4	D		_			
T		804	344		0.96		.23	80.4		74.7	E			
		673	158	3	0.06	5 0	. 43	20.4	С					
West	nuod		4		0.74	- 0		60.0	_					
L		192		0			.11		E		_			
		804					.23			30.2	. c			
R	h h - : -	1588	272		0.64	i U	.58	17.4	В					
Nort L		.na 258	171	0	0 25		1.5	16.6	Б.					
							.15			74				
IK		613	334	2	0.94	. 0	.18	79.0	Ŀ	74.6	5 E			
Sout	hbou													
L				7				82.1						
${f T}$				7			.34			67.0) E			
R		778	158				.49		В					
		Intorcor	2 t i 0 t	Dolar	_ 56	1 /	/++-	h l T	· n + 0 2 -	+		_ =		

Intersection Delay = 56.4 (sec/veh) Intersection LOS = E

Analyst: VRPA Technologies

Agency: SDC

Date: 4/2/07 Period: AM

Project ID: Existing + Cumulative

Inter.: Cuyamaca/Town Center Area Type: All other areas

Jurisd: San Diego County

Year : 2012

E/W	St: To	wn Cent	ter				N/S	St: 0	Cuyama	aca				
				SI	GNALIZ	ED I	NTERSE	CTION	SUMMA	ARY				
		Eas	stbour			tbou			rthbou		Sou	thbo	and	
		j L	T	R	L	Т	R	L	Т	R	L	Т	R	
No.	Lanes	2	1	1	2	2	1	·	3	1	2	3	1	-
LGCc	onfig	L	${f T}$	R	į L	${f T}$	R	L	T	R	L	${f T}$	R	1
Volu	ıme	144	20	41	16	42	160	61	412	2 11	1.53	736	278	İ
Lane	Width	12.0	12.0	12.0	12.0	12.0	12.0	112.0	12.0				12.0	i
RTOR	R Vol			10	l		40	Ì		1			70	i
Dura	tion	1.00		Area '					<u> </u>			· · · · · · · · · · · · · · · · · · ·		
Phas	e Comb:	ination	n 1	2	Sig 3	nal (4	Operat I	ions	5	6	7		3	
	Left		A		-	_	i NB	Left	A	•	•	,	_	
	Thru			A			1	Thru		А				
	Right			A			Ì	Right	-	A				
	Peds			**			1	Peds	-	A				
WB	Left		Α				ן ויס ו	Left	21					
WD	Thru		n	70			SB		A	70				
				A			ļ	Thru	_	A				
	Right			A				Right	-	A				
	Peds						!	Peds						
	Right						EB	Right						
	Right						WB	Right	-					
Gree			15.0	32.0					15.0					
Yell			4.0	4.0					4.0	4.0				
All	Red		1.0	1.0					1.0	1.0				
			₩			D = €				le Leng	gth:	120.0) se	cs
7 mm	:/ Lar						ormanc	e Summ		7				
Appr			•	Sat	Rd	tios		Lane	Group	Appı	oach			
Lane		oup		Rate	/-		70		- TOO	- 	- F O O			
Grp	Cal	pacity		(s)	v/c	g.	/c	ретау	LOS	Delay	, TOS			
	bound													
L		17	333		0.38		.13	48.8	D					
${f T}$		33	181		0.05		.27	32.7	С	44.6	D			
R		22	158	3	0.08	0	.27	33.1	С					
West	bound													
L	43		343		0.02	. 0	.13	46.0						
T	9		344	15	0.05	0	.27	32.7	С	35.3	D			
R	4 1	10	153	8	0.32	0	.27	35.7	D					
Nort	hbound													
L	4 1	17	333	8	0.16	0	.13	47.0	D					
T	15	561	492	9	0.29	0	.32	30.1	С	32.2	С			
R	48	37	153	8	0.00		.32	28.0	С					
Sout	hbound													
L		30	343	37	0.39	0	.13	48.8	D					
$_{ m T}^{-}$		507					.32			35.0-				
R		01	158		0.45	ე ი	.32	33.3		23.0	Ç			
		ntersed			= 35 = 35	3 /	 sec / v e	h) T		ection	T.O.S	- D		
				July	55.	_ (.	/ ve	, 1		CCLIOII	100	-		

Analyst: VRPA Technologies

Inter.: Cuyamaca/Town Center Agency: SDC Area Type: All other areas Jurisd: San Diego County Date: 4/2/07

Year : 2012

Period: PM

Т

1649

514

5074

0.55 0.32

Intersection Delay = 42.6 (sec/veh) Intersection LOS = D

1583 0.80 0.32

32.5

46.3

С

D

38.7 D

Project ID: Existing + Cumulative

E/W St: Town Center N/S St: Cuyamaca

					GNALIZ	ED I	NTERSE	CTION	SUMMA	ARY				
		Ea	stbou	nd	Wes	tbou	nd	No:	rthbou	ınd	Soi	ıthbo	und	1
		L	Т	R	L 	${f T}$	R	L 	T	R	<u>L</u> 	Т	R	I
No.	Lanes	2	1	1	2	2	1	- i —	3	1	2	3	1	-¦
LGC	onfig	L	${f T}$	R	L	${f T}$	R	L	T	R	L	T	R	i
Vol	ume	510	16	161	18	58	255	231	718		. – 1203	832	504	i
Lan	e Width	12.0	12.0	12.0	12.0	12.0	12.0	112.0	12.0		12.0		12.0	i
RTO	R Vol	1		40	ĺ		64	İ		1	l		126	i
Dur	ation	1.00		Area '			other							
							Operat	ions_						
	se Combi	natio		2	3	4			5	6	7	1	3	
EB	Left		A	A	_		NB	Left	A					
	Thru			A	A			Thru		Α				
	Right			A	А		į	Right	-	A				
	Peds		_					Peds						
WB	Left -		A				SB	Left	A					
	Thru				A			Thru		Α				
	Right				A			Right	:	A				
	Peds							Peds						
NB	Right						EB	Right						
SB	Right						WB	Right						
Gre			15.0	8.0	18.0				15.0)			
	low		4.0	4.0	4.0				4.0	4.0				
All	Red		1.0	1.0	1.0				1.0 Cvc	1.0 le Ler	nath:	120.0) <	ecs
			II	ntersed	ction	Perf	ormanc	e Summ			.9		, ,	
App	r/ Lan	.e		j Sat		tios			Group	Apr	roach	 1	.	
Lan	e Gro	up	Flo	w Rate					-		-			
Grp	Cap	acity		(s)	v/c	g	/c	Delay	/ LOS	Dela	y LOS	3		
	tbound												<u> </u>	
L	77		333		0.71		.23	45.4	D					
T	46		181		0.04		.26	33.3	С	43.4	l D			
R	40	9	1.58	33	0.32	0	.26	36.5	D					
	tbound	^	2.44	n 😙	0 0-	_			_					
L	43		343		0.05		.13	46.3	D					
T	51		344		0.12		.15	44.3	D	82.3	} F			
R	23	Τ	153	38	0.90	0	.15	97.2	F					
	thbound	7	222	n 0	0.00	_		F.O	_					
L	41		333		0.60		.13	52.1	D	_	_			
T		02	492		0.49		.32	31.6	С	36.6	D D			
R	50	U	153	38	0.00	0	.32	27.4	С					
	thbound	0	~			-								
L	43	U	343	3 7	0.51	0	.13	50.2	D					

Analyst: VRPA Technologies Inter.: Cuyamaca/Mission Gorge

Agency: SDC Area Type: All other areas Date: 4/2/07 Jurisd: San Diego County

Period: AM Year : 2012 Project ID: Existing + Cumulative Peak Hour Traffic

E/W St:	Mission	Gorge				N/S	S St: 0	Cuyama	aca				
			SIC	GNALI	ZED II	NTERSE	ECTION	SUMMA	ARY				
	Ea	stbour			stbou			rthbou		l So	ıthbo	und	1
	L	T	R	L l	T	R	L	Т	R	, L	Т	R	! ! !
No. Lan	es 2	3	1	2	3	1	- i —	2	0	í <u> </u>		0	
LGConfi	g L	${f T}$	R	L	${f T}$	R	L	TR		L	TR	_	i
Volume	140	567	269	136	956	90	292	235	39	215	404	78	i
Lane Wi	dth 12.0	12.0	12.0	12.0	12.0	12.0	12.0			12.0			i
RTOR Vo.	1		67	l		23	Ì		10	ĺ		20	į
Duration	n 1.00		Area 5	Type:	All	other	areas	w					
				Si	gnal (Operat	ions						
	ombination	n 1	2	3	4	1		5	6	7	;	3	
EB Lef		A				NB	Left	A	A				
Thr			A				Thru		Α	Α			
Rigl			A]	Right	-	A	A			
Ped						1	Peds						
WB Lef		A				SB	Left	A					
Thr			A			1	Thru			A			
Rigl			A			1	Right			A			
Ped:							Peds						
NB Rigl						EB	Right	. A	A				
SB Rigl	ht					WB	Right	: A					
Green		14.0	42.0					14.0	8.0	17.	. 0		
Yellow		4.0	4.0					4.0	4.0	4.0)		
All Red		1.0	1.0					1.0	1.0	1.0)		
		_	,				_	Сус	cle Ler	igth:	120.0)	secs
7	Ŧ					ormanc	e_Sumπ					······	
Appr/	Lane	_	Sat	Ra	atios		Lane	Group	App	roach	1		
Lane	Group		Rate										
Grp	Capacity	((s)	v/c	g/	C C	Delay	, LOS	Dela	y Los	3		
Eastbour			_			· · · · ·							
L -	389	333		0.39		.12	49.7	D					
T	1725	492		0.36		. 35	27.5	С	27.1	. С			
R	976	158	13	0.23	3 0.	. 62	10.4	В					
Westbour													
L	401		17		0.	12	49.5	D					
	1725		.9	0.60		35			32.2	. C			
R	782	153	88	0.09	0.	51	15.3	В					
Northbou					_								
L	751	333		0.42	2 0.	22	40.2	D					
TR	847	338	18	0.34	0.	25	37.1	D	38.7	D			
Southbou													
L			7					D					
TR	705	497	9	0.71	0.	14	52.6	D	52.6	D			

Intersection Delay = 36.1 (sec/veh) Intersection LOS = D

Analyst: VRPA Technologies

Inter.: Cuyamaca/Mission Gorge Area Type: All other areas Jurisd: San Diego County

Agency: SDC Date: 4/2/07

Year : 2012

Period: PM

Project ID: Existing + Cumulative

E/W St: Mission Gorge

N/S St: Cuyamaca

			s	GNALI	ZED II	NTERSI	ECTION	SUMM	ARY				
	Ea	stbou	nd	We	stbou	nd	No:	rthbo	und	l So	uthbo	und	1
	L	Т	R	l L	T	R	L	T	R	L	T	R	į
No. Lanes	i 2	3	1	- 2	3	1	-	2	0	-¦	3	0	_
LGConfig	l L	${f T}$	R	L	${f T}$	R	L	TR		L	TR		i
Volume	1371	1121	234	205			614	693	149	1359	589	104	i
Lane Width	12.0	12.0	12.0	112.0	12.0	12.0	112.0	12.0		112.0	12.0	_ + +	i
RTOR Vol			59	1		37	İ		37	i		26	i

Dur	ation	1.00	Area	Type: A	ll other	areas			**	· · · · · · · · · · · · · · · · · · ·
					al Opera					
Pha	se Combi	nation 1	2	3	4		5	6	7	8
EB	Left	A	A		NE	Left	A	A		
	Thru		A	A	1	Thru		A	A	
	Right		A	A	İ	Right		Α	A	
	Peds				İ	Peds				
WB	Left	A			SB	Left	A			
	Thru			A	1	Thru			A	
	Right			A	i	Right			A	
	Peds				ĺ	Peds				
NB	Right				EB	Right	A	A		
SB	Right				WB	-	A			
Gre	en	12.	0 5.0	35.0		_	16.0	5.0	17.0	
Yel	low	4.0	4.0	4.0			4.0	4.0	4.0	
All	Red	1.0	1.0	1.0			1.0	1.0	1.0	

Cycle Length: 120.0 secs

		Intersec	tion Pe	erforman	ce Summa	ıry		
Appr/	Lane	Adj Sat	Rati	ios	Lane G	roup	Appro	pach
Lane	Group	Flow Rate						
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS
Eastbou	ınd							**************************************
L	630	3437	0.65	0.18	47.7	D		
${f T}$	1903	5074	0.65	0.38	31.8	С	33.0	С
R	1003	1583	0.19	0.63	9.3	A		
Westbou	ınd							
L	344	3437	0.66	0.10	56.4	E		
T	1480	5074	0.63	0.29	37.6	D	39.2	D
R	739	1583	0.16	0.47	18.6	В		
Northbo	und							
\mathbf{I}_{t}	745	3437	0.92	0.22	64.2	E		
TR	781	3473	1.14	0.22	322.4	F	210.7	F
Southbo	ound							
L	458	3437	0.87	0.13	68.7	E		
TR	706	4985	1.05	0.14	175.7	F	138.2	F

Intersection Delay = 102.7 (sec/veh) Intersection LOS = F

Analyst: VRPA Technologies

Inter.: Cottonwood/Mission Gorge

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: AM

Year : 2012

Project ID: Existing + Cumulative

E/W St: Mission Gorge

N/S St: Cottonwood

B/# 0C.	131031011	Gorge		N/S	St: C	otton	wood			
		SI	GNALIZE	D INTERSE	CTION	SUMMA	.RY			
	į Ea:	stbound		bound		thbou		Sou	thbound	l 1
	L 	T R	T	T R	L	Т	R	L	T F	•
No. Lane	es 1	3 0	' <u> </u>	3 0	- i — — —	1	¦	0	1 1	
LGConfig	g L	TR	, L	TR		LT	R	Ŭ		R I
Volume	[43	606 48		213 17	58		•	12 !	5 41	,
Lane Wid	dth 12.0	12.0	112.0 1		•	12.0			12.0 12	•
RTOR Vol	1	12		7	İ		14	•	13	
Duration	n 1.00	Area		ll other			· · · · · · · · · · · · · · · · · · ·			
Phase Co	ombination	n 1 2	Signa	al Operat 4	ions					
EB Left		A 2	S		Task	5	6	7	8	
Thru		A		NB	Left	A				
Righ		A		[[Thru	A				
Peds		Α.		<u> </u>	Right	A				
WB Left	_	A		l 1 CD	Peds		_			
Thru		A		SB	Left		A			
Righ		A		l l	Thru		A			
Peds		A		l I	Right		A			
NB Righ	=			ן סים ז	Peds					
SB Righ				EB WB	Right					
Green		14.0 66.0		₩□	Right	10.0	10.0			
Yellow		4.0 4.0				4.0				
All Red		1.0 1.0					4.0			
1100		1.0				1.0	1.0		00 0	
		Interse	ction Pa	erformanc	e Summ:	cyc.	le Len	gtn: 1	20.0	secs
Appr/	Lane	Adj Sat	Rati	OS	Lane (7 ran	roach		·
Lane	Group	Flow Rate		.05	mane (aroub	мрр.	LOacii		
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Dela	y Los		
Eastbour	nd									
L	201	1719	0.23	0.12	48.7	D				
TR	2693	4896	0.26	0.55	9.7	A	12.2	В		
Westboun	nd									
L	207	1770	0.40	0.12	50.4	D				
TR	2708	4923	0.49	0.55	11.5	В	13.8	В		
Northbou	ind									
LT	144	1732	0.49	0.08	55.1	E	54.7	D		
R	128	1538	0.40	0.08	54.2	D E	J4./	υ		
Southbou			0.40	5.00	74.7	ט				
LT	150	1798	0.12	0.08	51.3	D	51.9	D		
R	132	1583	0.23	0.08	52.3	D	J1.3	D		
		tion Delay				-	ection	T.OS	R	
		- 1		, = = = ,	-, -1			700 -	لبد	

Analyst: VRPA Technologies

Inter.: Cottonwood/Mission Gorge

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: PM

Year : 2012

Project ID: Existing + Cumulative

E/W St: Mission Gorge

N/S St: Cottonwood

E/W DL.	WIPPION (-01de		N/S	5 St: (Cotton	wood				
		SI	GNALIZE	D INTERSE	ECTION	SUMMA	RY				
	į Eas	stbound	West	bound	Noi	thbou	nd	Sou	thbou	ınd	
	L 	T R	L	T R	L	T	R J	Ŀ	T	R	,
No. Lane	es 1	3 0	1 1	3 0	- i	1	;	0	1	1	- <u>'</u>
LGConfig	j L	TR	L	TR	İ	LT	Ri	Ŭ	LT	R	1
Volume	125	1422 90	41 1	159 8	79			13	8	52	1
	ith 12.0	12.0	12.0 1	2.0	İ	12.0			12.0		i
RTOR Vol	.	22	+	2	1		20 j			13	i
Duration	1.00	Area		ll other			·			P. H. L. J.	
Phase Co	mbination	n 1 2	3 sign	al Operat 4 I	lons	5					
EB Left		A 2	J	i I NB	Left	э А	6	7	8	\$	
Thru		A		1 140	Thru	A					
Righ		A		! 1	Right						
Peds		11		l I	Peds	. д					
WB Left		A		l SB	Left		A				
Thru		A		1	Thru		A A				
Righ		A		i I	Right		A				
Peds		••		Ì	Peds	•	A				
NB Righ	ıt			, EB	Right						
SB Righ				WB	Right						
Green		14.0 63.0		,		13.0	10.0				
Yellow		4.0 4.0				4.0	4.0				
All Red		1.0 1.0				1.0	1.0				
							le Len	ath:	120.0	se	CS
		Intersed	ction P	erformanc	e Summ	ary		J			
Appr/	Lane	Adj Sat	Rat			Group	App	roach			
	Group	Flow Rate				-					
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Dela	y Los	****		
Eastboun											
L	201	1719	0.13	0.12	47.9	D					
TR	2574	4902	0.63	0.52	15.2	В	15.7	В			
Westboun											
L	207	1770	0.22	0.12	48.6	D					
TR	2586	4925	0.49	0.52	13.4	В	14.6	В			
Northbou	nd										
LT	187	1730	0.50	0.11	52.5	D	52.0	D			
R	167	1730 1538	0.50 0.38	0.11 0.11	52.5 51.2	D D	52.0	D			
	167						52.0	D			
R Southbou	167 nd	1538	0.38	0.11	51.2	D					
R	167 nd 151	1538 1808	0.38	0.11	51.2	D D	52.6				
R Southbou LT	167 nd 151 132	1538	0.38 0.15 0.32	0.11	51.2 51.5 53.2	D D D		D	- D		

Analyst: VRPA Technologies

Inter.: Magnolia/Mission Gorge

Agency: SDC Area Type: All other areas Jurisd: San Diego County Date: 4/2/07

Year : 2012

Period: AM Project ID: Existing + Cumulative Peak Hour Traffic

E/W St: Mission Gorge N/S St: Magnolia

SIGNALIZED	INTERSECTION	SUMMARY

			GMALL	ard Ti	MIEVO	ECLION	POLIM	ARI				
Eas	Eastbound T. T P		We	stbou	nd	No:	rthbo	und	Soi	uthbo	und	
L	${f T}$	R	L	${f T}$	R	L	T	R	L	T	R	-
1									1			
1 2	2	1	2	2	0	2	2	1	2	2	1	_
L	${f T}$	R	L	TR		l L	${f T}$	R	L	\mathbf{T}	R	
1112	375	154	1277	915	185	[308	492	289	221	710	156	
112.0	12.0	12.0	112.0	12.0		[12.0	12.0	12.0	12.0	12.0	12.0	
1		39	l		46	1		72			39	
	L 2 L 112	L T 2 2 L T 112 375	Eastbound L T R 2 2 1 L T R 112 375 154 12.0 12.0 12.0	Eastbound West L T R L	Eastbound Westbound L T R L T	Eastbound Westbound L T R L T R L T R L T R L T T T T T T T T T	Eastbound Westbound No. L T R L L L L L L L L L	Eastbound Westbound Northbound L T R L T R L T	L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T	Eastbound Westbound Northbound Solution L T R L T R L L L L L L L L L	Eastbound	Eastbound Westbound Northbound Southbound L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L

Dur	ation	1.00		Area	Type:	All	ot	her	areas				****	
					Si	gnal	. Op	erat	ions					
Pha	se Combi	lnation	1	2	3		4			5	6	7	8	
EB	Left		Α					NB	Left	A				
	Thru			A					Thru		A			
	Right			A			1		Right		A			
	Peds						1		Peds					
WB	Left		A				1	SB	Left	A				
	Thru			A			I		Thru		A			
	Right			A			1		Right		A			
	Peds						- 1		Peds					
NB	Right						- 1	EB	Right					
SB	Right						1	WB	Right					
Gre	en		14.0	43.0)				_	14.0	29.0			
Yel	low		4.0	4.0						4.0	4.0			
All	Red		1.0	1.0						1.0	1.0			

Cycle Length: 120.0 secs

		Intersed	ction Pe	rforman	ice Sumn	nary				
Appr/	Lane	Adj Sat	Rati	.05	Lane	Group	Appr	oach		
Lane	Group	Flow Rate								
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
Eastbo	ınd									
L	389	3338	0.31	0.12	49.1	D				
T	1234	3445	0.33	0.36	26.4	С	30.7	С		
R	567	1583	0.22	0.36	27.0	С				
Westbo	ınd									
L	401	3437	0.75	0.12	59.4	E				
TR	1210	3377	0.95	0.36	55.2	E	56.1	E		
Northbo	ound									
L	389	3338	0.86	0.12	72.8	E				
\mathbf{T}	833	3445	0.64	0.24	42.6	D	52.1	D		
R	372	1538	0.63	0.24	44.3	D				
Southbo	ound									
L	401	3437	0.60	0.12	52.8	D				
T	857	3547	0.90	0.24	59.0	E	55.4	E		
R	383	1583	0.33	0.24	38.0	D		_		
	Intersec	tion Delay	= 51.0			Interse	ction	Los =	= D	

Year : 2012

Analyst: VRPA Technologies

1005

449

430

650

290

R

L

 \mathbf{T}

R

Southbound

3445

1538

3437

3547

1583

0.95

0.55

0.55

0.87

0.33

0.29

0.29

0.13

0.18

0.18

Intersection Delay = 53.9 (sec/veh) Intersection LOS = D

66.0

37.4

50.9

61.9

43.3

 \mathbf{E}

D

Ε

D

D

55.2 E

57.0 E

Inter.: Magnolia/Mission Gorge Agency: SDC Area Type: All other areas Date: 4/2/07 Jurisd: San Diego County

Period: PM

Project ID: Existing + Cumulative

E/W St: Mi			r Cumu	TALTV	е	N/	S St: N	Magnoi	lia				
			SI	GNALI	ZED I	NTERS	ECTION	STIMM	ARY				
	Ea	stbou			stbou			rthboi		J 501	uthbo	und	 -
	L	${f T}$	R	jь	Т	R	L	T	R] L	T	R	1
	1			İ			j	_		. – I	-		1
No. Lanes	1 2	2	1	1 2	2	0	- i2	2	1	i 2	2	1	¦
LGConfig	L	${f T}$	R	L	TR		L	Т	R	L _	T	R	i.
Volume	176	895	392	1245	656	147	390	879	304	219	522	118	i
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0		112.0			
RTOR Vol	1		98	1		37	Î		76	1		30	i
Duration	1.00		Area	Type:	All	other	areas						
						Operat							
Phase Combi	inatio	n 1	2	3	4			5	6	7		8	
EB Left		A				l NB	Left	A	A				
Thru			A			1	Thru		A	A			
Right			A			1	Right	:	A	A			
Peds						1	Peds						
VB Left		A				SB	Left	A					
Thru			A				Thru			А			
Right			A				Right	:		A			
Peds						1	Peds						
NB Right						EB	Right						
SB Right						WB	Right						
Green		14.0	36.0					15.0	8.0	22.	0		
Yellow		4.0	4.0					4.0	4.0	4.0)		
All Red		1.0	1.0					1.0	1.0	1.0)		
								Сус	le Ler) s	ecs
****		Ir	ntersec	ction	Perf	ormano	e Summ	ary		_		-	
Appr/ Lan		Adj	Sat	Rε	tios		Lane	Group	App	roach	!		
Lane Gro	-		, Rate										
Grp Cap	acity	((s)	v/c	g,	/C	Delay	LOS	Dela	y Los			
Eastbound													
L 38		333		0.49		.12	50.6	D					
	34	344		0.94		.30	61.4	E	55.6	E E			
47	5	158	13	0.67	' 0.	.30	40.7	D					
Vestbound	_												
<u>.</u> 40		343		0.66		.12	54.9	D					
PR 10	11	337	'1	0.82	. 0.	.30	44.4	D	47.0	D			
Jorthbound													
77	9	333	8	0.54	0	. 23	/1 O	Б					
	05	2//		0.04		. 23	41.2	D					

Analyst: VRPA Technologies

Inter.: Magnolia/Prospect Ave

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: AM Year : 2012
Project ID: Existing Plus Cumulative AM Peak Hour

E/W St:	Prospect	sting Plus (: Ave	Cumulati		ak Hour 3 St: M		ia				
		s.	TGNALTZEI	D INTERSE		_					
	Ea	stbound		bound		thbou		801	ıthboı	224	<u> </u>
	i L	T R		r R	L	Т	R	L	Т	R	
No. Lan	•		-¦1	2 2		2	0	2	2	1	
LGConfi	-	T R	L	T R	L	${\tt TR}$	1	L	${f T}$	R	
Volume	63	258 70		29 1191				559	409	145	
Lane Wi RTOR Vo	•	12.0 12.0	12.0 12	2.0 12.0	112.0	12.0		12.0	12.0		İ
RTUR VO		17		298	1		10			36	
Duratio	n 1.00	Area		ll other							
Phase C	ombinatio	n 1 2	3	al Operat 4	lons						
EB Lef		A 2	J	4 NB	T - +	5	6	7	8	3	
Thr		A		1 (21/1)	Left	A	**				
Rig		Ā		<u> </u>	Thru		A				
Ped		A		I I	Right Peds		A				
WB Lef		A		l SB	Left	А					
Thr		A		1 20	Thru	А	73				
Rig		A		<u> </u>	Right		A A				
Ped				1	Peds		А				
NB Rig	ht			l EB	Right	A					
SB Rig		A		I WB	Right	A					
Green		15.0 37.0)	,		21.0	27.0				
Yellow		4.0 4.0				4.0	4.0				
All Red		1.0 1.0				1.0	1.0				
		Intorac	ation D			Сус	le Len	gth:	120.0	sec	:s
Appr/	Lane	Adj Sat	Rati	rformanc							
Lane	Group	Flow Rate		.05	Lane G	roup	App.	roach			
Grp	Capacity		v/c	g/C	Delay	LOS	Dela	y LOS			
Eastbou	 nd						············				
I.,	215	1719	0.32	0.13	48.7	D					
T	1062	3445	0.26	0.31	30.7	Ċ	31.4	С			
R	831	1583	0.07	0.52	14.1	В	51.1	C			
Westbou	nd					_					
L.	221	1770	0.51	0.13	51.0	D					
T	1062	3445	0.64	0.31	36.4	D	29.6	С			
R	1429	2722	0.68	0.52	22.4	С					
Northbo											
L	301	1719	0.15	0.17	42.2	D					
TR	693	3078	0.06	0.22	36.6	D	39.4	D			
Southbou											
L	601	3437	1.01	0.17	134.6	F					
T	798	3547	0.56	0.22	42.1	D	88.3	F			
R	620	1583	0.19	0.39	24.1	С					
	Interse	ction Delay	= 50.1	(sec/vel	ו) In	terse	ction	Los =	= D		

Analyst: VRPA Technologies

Inter.: Magnolia/Prospect Ave Area Type: All other areas Jurisd: San Diego County

Agency: SDC
Date: 4/2/07
Period: PM

Year : 2012

Project ID: Existing Plus Cumulative PM Peak Hour

N/S St: Magnolia

E/W St: Prospect Ave

			s:	IGNALI	ZED I	NTERSI	ECTION	SUMM	ARY	
	Ea	stbou:	nd	We	stbou	nd	No	rthbo	und	Southbound
	l 1	${f T}$	R	ļ L I	Т	R	I.	T	R	L T R
No. Lanes	i 1	2	1	-¦	2	2	-¦	2	0	_
LGConfig	L	${f T}$	R	L	${f T}$	R	L	TR		il TRI
Volume	•	746	56	1141		1283		443	148	992 309 76 1
Lane Width	112.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		112.0 12.0 12.0
RTOR Vol	ļ		14			320			47	l 19 j

Dura	tion	1.00		Area	Type:	Al	l ot	her	areas				*****	
									ions					
Phas	e Combi	nation	1	2	3	_	4			5	6	7	8	
EB :	Left		A				i	NB	Left	Ā	Ā	•	J	
1	Thru			A			i		Thru		A	A		
,	Right			A			j		Right		A	A		
	Peds						i		Peds		•••			
WB :	Left		A				i	SB	Left	А				
1	Thru			A			i		Thru	P		А		
1	Right			A			į		Right	_		A		
	Peds						i		Peds			**		
NB 1	Right						i	EВ	Right	A				
SB 1	Right		A				i	WВ	Right	A				
Gree	n	. 1	5.0	30.0			•		5	24.0	8.0	18.0		
Yell	OW	4	.0	4.0						4.0	4.0	4.0		
All I	Red	1	.0	1.0						1.0	1.0	1.0		
												gth: 120	.0	secs

Intersection Performance Summary Appr/ Lane Adj Sat Ratios Lane Group Approach Lane Group Flow Rate Grp Capacity (s) v/c g/C Delay LOS Delay LOS Eastbound L 215 1719 0.51 0.13 51.0 D T 861 3445 0.94 0.25 69.0 E 64.5 Ε R 778 1583 0.06 0.49 16.0 В Westbound L 221 1770 0.69 0.13 59.7 Е Т 861 3445 0.65 0.25 42.0 D 35.4 D R 1338 2722 0.78 0.49 28.4 С Northbound $_{
m L}$ 367 1719 0.26 0.31 33.8 С ΤR 865 3349 0.68 0.26 42.4 41.2 D Southbound L 687 3437 1.57 1080 0.20 F \mathbf{T} 1241 3547 0.27 0.35 26.5 С 795.8 F R 501 1583 0.12 0.32 29.3 С Intersection Delay = 271.7 (sec/veh) Intersection LOS = F

Analyst: VRPA Technologies

Inter.: Cuyamaca/Town Center Area Type: All other areas

Agency: SDC Date: 4/2/07

Jurisd: San Diego County

Period: AM Year : 2012

Project ID: Existing + Cumulative + Project

E/W St: Town Center N/S St: Cuyamaca

			s:	IGNALI:	ZED II	NTERSI	ECTION	SUMM.	ARY				
	Eas	stbou	nd	We	stbou	nd	No:	rthbo	und	So	uthboi	und	T
	L 	T .	R	L 	T	R	L	Т	R	L 	Т	R	İ
No. Lanes	1 2	1	1	1 2	2	1	2	3	1	i 2	3	1	- <u>i</u>
LGConfig	<u>L</u>	${f T}$	R	L	${f T}$	R	L	Т	R	L	${f T}$	R	i
Volume	144	22	41	9	44	161	61		6	1154	736	278	i
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	i
RTOR Vol	1		10	1		40			1	1		70	1

Dur	ation	1.00	Area	Type:	All	ot	her	areas					·
					gnal								
Pha	se Combi	nation 1	2	3	4	1			5	6	7	8	
EB	Left	A				- 1	NB	Left	A				
	Thru		A			- 1		Thru		A			
	Right		A			1		Right		A			
	Peds					1		Peds					
WB	Left	А				1	SB	Left	A				
	Thru		A			- 1		Thru		A			
	Right		A					Right		А			
	Peds					- 1		Peds					
NB	Right					-	EB	Right					
SB	Right						WB	Right					
Gre	en	15.	.0 32.	0				_	15.0	38.0			
Yel		4.0	4.0						4.0	4.0			
All	Red	1.0	1.0						1.0	1.0			

Cycle Length: 120.0 secs

		Intersec	tion Pe	rformand	e Summa	ary	2		
Appr/	Lane	Adj Sat			Lane (Appro	oach	
Lane	Group	Flow Rate							
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	
Eastbou	nd			T-1111 W					
L	417	3338	0.38	0.13	48.8	D			
${f T}$	483	1810	0.05	0.27	32.7	С	44.5	D	
R	422	1583	0.08	0.27	33.1	С			
Westbou	nd								
L	430	3437	0.02	0.13	46.1	D			
${f T}$	919	3445	0.05	0.27	32.7	С	35.5	D	
R	410	1538	0.32	0.27	35.8	D			
Northbo:	und								
L	417	3338	0.16	0.13	47.0	D			
T	1561	4929	0.29	0.32	30.1	С	32.2	С	
R	487	1538	0.01	0.32	28.1	С		_	
Southbo	und								
L	430	3437	0.39	0.13	48.9	D			
T	1607	5074	0.50	0.32	32.6	С	35.0+	D	
R	501	1583	0.45	0.32		Ċ	-		
	Intersec	tion Delay	= 35.3	(sec/ve		nterse	ction I	OS = D	

Analyst: VRPA Technologies

Inter.: Cuyamaca/Town Center Area Type: All other areas

Agency: SDC Date: 4/2/07

Jurisd: San Diego County

Period: PM Year : 2012

Project ID: Existing + Cumulative + Pro

Project E/W St:	ID:	Exis n Cen	ting ter	+ Cumu	ılativ	∋ + P	_	t 3 St: (Cuyama	aca			
				ST	CNAT.T	יד מיקי		ECTION					
		Ea	stbou			stbou			summ. rthboi				
		L	T	R	L	т Т	R R	l L	r endoi T		•	ıthboı	•
			-	1,	1 -	1	K	1 1	1	R	L	T	R
No. Lan	ies	2	1	1	ˈ <u> </u>	2	1	-¦	3	1	¦	3	
LGConfi		L	T	R	L	T	R	L	T	R	l Z		1
Volume	_	510	18	161	122	60	257	231	718	8	1 205	T 832	R 504
Lane Wi			12.0		12.0			112.0			12.0		•
RTOR Vo				40			64		12.0	2	1 12.0	12.0	12.0
Duratio	n	1.00		Area	Type:	All	other	areas					
w							Operat						
Phase C	ombir	natio	n 1	2		4	Ĩ	-	5	6	7		 3
EB Lef			A	A			NB	Left	Ā	-	•		-
Thr	u			A	A		ı	Thru	-	A			
Rig	ht			A	A		Ì	Right	2	A			
Ped	s						İ	Peds					
WB Lef			A				SB	Left	A				
Thr					A		1	Thru		Α			
Rig					Α			Right	:	A			
Ped							1	Peds					
NB Rig							EB	Right	;				
SB Rig	ht						WB	Right		•			
Green			15.0	8.0	18.0	ŀ			15.0	39.0)		
Yellow			4.0	4.0	4.0				4.0	4.0			
All Red			1.0	1.0	1.0				1.0	1.0			
									Сус	:le Ler	igth:	120.0) secs
			Ir	ıterse			ormano	e Summ					
Appr/	Lane			Sat		tios		Lane	Group	App	roach		
Lane	Grou	-		Rate									
Grp	Capa	city	((s)	v/c	g/	C C	Delay	LOS	Dela	y Los		
Eastbou		••				70	*****						
L	779		333		0.71		.23	45.4	D				
T	468		181		0.04		26	33.4	С	43.4	D		
R	409		158	13	0.32	0.	26	36.5	D				
Westbou			0.40	_									
L	430		343		0.06		13	46.3	D				
	517		344		0.13			44.3		84.4	F		
R	231		153	8	0.91	0.	15	101.2	F				
Northbou			222	0	0 60	_	1.0	.					
L T	417		333		0.60		13	52.1	D				
R	160 500		492		0.49			31.6	C	36.5	D		
r Southboi			153	O	0.01	υ.	32	27.5	С				
L	una 430		343	7	0	_	1 2	F 0 0	_				
T	164				0.52		13		D	~ -			
R	514		507 158				32			38.8	D		
11					0.80		32	46.3	D				

Intersection Delay = 42.8 (sec/veh) Intersection LOS = D

Analyst: VRPA Technologies

Inter.: Cuyamaca/Mission Gorge

Agency: SDC Area Type: All other areas Date: 4/2/07 Period: AM

Jurisd: San Diego County Year : 2012

Project ID	: Exis			lative	+ P1	_	:	:012					
E/W St: Mi	ssion	Gorge				N/S	S St: C	Cuyama	ca				
			SI	GNALIZ	ED I	ITERSE	CTION	SUMMA	RY				
	=	stbou		Wes	tbour			thbou		Sou	thbou	nd	<u> </u>
	L	T	R	L	T	R	L	T	R	L	${f T}$	R	Ì
No. Lanes	2	3	7	ļ			-		!				1
LGConfig	L	o T	1 R	2 L	3 T	1 R	2	2	0	2	3	0	1
Volume	1144	572		1138	960	90 90	L 292	TR 235	41 [L 215	TR	0.7	
Lane Width				112.0			1232		•	215 12.0		81	!
RTOR Vol	i		67	1	12.0	23	12.0		10	12.0		20	l I
Duration	1.00		7						·				
Duration	1.00		Area	Type: Sia		tner perat							
Phase Comb	inatio	n 1	2	3	4			5	6	7	8		
EB Left		Α				NB	Left	A	A		-		
Thru			A			Ť	Thru		A	A			
Right			A				Right		A	A			
Peds							Peds						
WB Left		A				SB	Left	Α					
Thru			A			İ	Thru			A			
Right			A			ļ	Right			A			
Peds NB Right							Peds	_	_				
SB Right						EB	Right		A				
Green		14.0	42.0			WB	Right			17	^		
Yellow		4.0	4.0					14.0 4.0	8.0	17.0	U		
All Red		1.0	1.0					1.0	4.0 1.0	4.0			
		1.0	1.0						le Leng		120 0	,	2005
		Ir	nterse	ction	Perfo	rmanc	e Summ	arv	re nem	gui	120.0	2	secs
Appr/ Lar	ne		j Sat		tios			Group	Appı	roach			
	oup	Flov	w Rate			_		-					
Grp Cap	pacity	((s)	v/c	g/	C	Delay	LOS	Delay	y LOS	<u> </u>		
Eastbound													
L 38	39	333	38	0.40	0.	12	49.8	D					
T 17	725	492	29	0.36			27.5	C	27.2	С			
	76	158	33	0.23	0.	62	10.4	В					
Westbound	3.1	240	. –		_								
	01	343		0.37			49.5	D					
	725 32	492		0.60			31.0	C	32.3	С			
Northbound	J	153	0	0.09	0.	2.1	15.3	В					
	51.	333	3.8	0.42	0.	22	40.2	D					
	16	338		0.34			37.1	D D	38.7	D			
								_	23.,	D			
Southbound		- · -	. =		_								
L 40		343		0.58			52.4	D					
TR 70	10	497	5	0.72	0.	14	52.8	D	52.7	D			

Intersection Delay = 36.1 (sec/veh) Intersection LOS = D

Analyst: VRPA Technologies

Inter.: Cuyamaca/Mission Gorge Area Type: All other areas

Agency: SDC Date: 4/2/07

Jurisd: San Diego County

Period: PM Year : 2012

Project ID: Existing + Cumulative + Project

Project E/W St:	ID:	Exis ion (ting Gorge	+ Cumu	lativ	e + P		t S St: (Cuyama	aca				
				ST	CNAT.T	ת מעל	ифгрс	ECTION	CIIMM	N D W				
		Ea:	stbou	 nd		stbou			rthbo		l 80:	uthbo		
	ĺ	L	T	R	L	T	R	L	Т	R	L	T	R	
No. Lan	es	2	3		1 2	3	1	_ 2	2	0	l l 2	3	0	
LGConfi	g l	L	Т	R	L	${f T}$	R	L	TR	Ü	L	TR		l I
Volume	•	376	1128		207	844	146	614	693	151	359	589	108	1
Lane Wi		12.0	12.0	12.0	112.0	12.0	12.0	12.0			12.0			,
RTOR Vo	1			59	1		37	1		38			27	İ
Duratio	n i	1.00		Area				areas						
Db C							Operat	cions			·			
Phase C EB Lef		atior		2	3	4			5	6	7		8	
Thr			A	70			NB	Left	A	_				
Rig:				A A				Thru		A				
Ped				A			1	Right	-	A				
WB Lef			А				 SB	Peds Left	А					
Thr			**	A			1 35	Thru	А	71				
Rig				A			1	Right		A A				
Ped							ı İ	Peds	-	A				
NB Rigi	hţ						EB	Right	. A					
SB Righ	ht						WB	Right						
Green			14.0	44.0				5	22.0	20.0				
Yellow			4.0	4.0					4.0	4.0				
All Red			1.0	1.0					1.0	1.0				
			_	_					Сус	le Len	gth:	120.0	0 :	secs
7			Ir	iterse			ormano	e Summ						
Appr/	Lane		_	Sat	Rā	tios		Lane	Group	App	roach			
Lane Grp	Group Capac			Rate			7.5							
Gīb	capac	тту	((s)	∀/c	g/	, C	Delay	LOS	Dela	y Los			
Eastbour					***	· · · · · · · · · · · · · · · · · · ·								
L	389		333		1.05	0.	12	203.7	F					
T	1807	!	492		0.68		37	30.8	С	67.5	E			
R	937		158	13	0.20	0.	59	11.5	В					
Westbour														
L T	401		343		0.56		12	51.9	D					
R	1807 910		492		0.51		37	27.7	С	30.4	С			
Northbou			153	Ö	0.13	U.	59	10.9	В					
L LIBOT	612		333	Ω	1 00	^	10	940 0	***					
TR	562		337		1.09 1.56		18 17	240.8	F	7.00	г —			
	J U 2.		JJ 1	J	т. Эр	u.	1/	1065	F	708.	5 F			
Southbou														
L	630		343		0.62		18	47.0	D					
TR	830		498	2	0.88	0.	17	60.7	E	55.9	E			

Intersection Delay = 229.2 (sec/veh) Intersection LOS = F

Analyst: VRPA Technologies

Inter.: Cottonwood/Mission Gorge

Area Type: All other areas Jurisd: San Diego County

Date: 4/2/07 Period: AM

Agency: SDC

Year : 2012

Project ID: Existing + Cumulative + Project

E/W St:	Mission	Gorge	iracive	_	s St: (Cotton	ıwood			
w		si	GNALIZE	D INTERSE	ECTION	SUMMA	RY			
	•	stbound	West	bound		rthbou		Sou	thboun	<u> </u>
	L	T R	<u>T</u> .	T R	L 	Т	R	l L	T	R į
No. Lane		3 0	1	3 0	i 0	1	1	0	1	¦
LGConfi	-	TR	L	TR	İ	LT	R		\mathtt{LT}	R I
Volume	50	606 48	•	213 23	58	6		16	5 4	7
	dth 12.0		12.0 1		1	12.0	•	ı	12.0 1	•
RTOR Vol	<u> </u>	12	I	6	ł		15		1	2
Duration	n 1.00	Area		ll other				***		
Phase Co	ombination	n 1 2	Sign 3	al Operat	ions					
EB Left		A	3	4 NB	Left	5 A	6	7	8	
Thru		A		1 140	Thru	A				
Righ		A		i	Right					
Peds				i	Peds	- 11				
WB Left	-	A		i sb	Left		A			
Thru		A		ì	Thru		A			
Righ		A		ĺ	Right	:	A			
Peds				1	Peds					
NB Righ				EB	Right					
SB Righ	nt	4.4		! WB	Right					
Green		14.0 56.0				15.0	15.0			
Yellow All Red		4.0 4.0				4.0	4.0			
ATT VEG		1.0 1.0				1.0	1.0	~+b.	100 0	
		Interse	ction Pe	erformanc	e Summ	arv	le Len	gtn:	120.0	secs
Appr/ Lane	Lane Group	Adj Sat Flow Rate	Rati			Group	App	roach		
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Dela	y Los		
Eastboun	ıd	W 1800 L 1								
L	201	1719	0.27	0.12	49.1	D				
TR	2285	4896	0.31	0.47	16.3	В	18.6	В		
Westboun	ıd									
L	207	1770	0.40	0.12	50.4	D				
TR	2296	4919	0.58		19.5	В	21.3	С		
Northbou	ınd									
LT	217	1732	0.32	0.72	40 7	-	45 -	_		
R	192	1538	0.32		48.7		48.5	D		
Southbou		1720	U.20	0.13	48.2	D				
LT	224	1793	0.10		46.7	D	47.2	D		
R	198	1583		0.13	47.5	D				
	INTERSEC	cion Delav	= 22.5	(sec/vel	1 ነ Ti	nterse	ection	TOS =	<u>-</u> C	

Analyst: VRPA Technologies

Agency: SDC

Date: 4/2/07

Inter.: Cottonwood/Mission Gorge

Area Type: All other areas Jurisd: San Diego County

Period: PM Year : 2012

Project ID: Existing + Cumulative + Project
E/W St: Mission Gorge N/S St: Cottonwood

E/W St:	Mission	Gorge		N/	S St: C	otton	wood			
		į	SIGNALIZE	D INTERS	ECTION :	SUMMA	RY			
	Ea	stbound		bound		thbou		Sou	thbound	
	L	T R	L	T R	L	T	R	L	T R	į
No. Lan	nes i 1	3 0		3 0	-¦	1	'. 1 '	0	1 1	! !
LGConfi	-	TR	L	TR	Ì	$_{ m LT}$	R	_	LT F	₹່
Volume	34	1422 90		159 15			79 ji	19	8 60	j
			12.0 1] :		12.0		12.0 12.	.0
RTOR Vo) T	23	I	4		;	20		15	1
Duratio	n 1.00	Area	a Type: A					··.		****
Phase C	ombination	n 1 2	signa 3	al Opera	tions		6		8	
EB Lef		A	_	- I NB	Left	A	Ü	′	O	
Thr	·u	A		İ	Thru	A				
Rig		A		1	Right	Α				
Ped		_		ļ	Peds					
WB Lef Thr	=	A		SB	Left		A			
Rig		A A		l I	Thru		A			
Ped		А		l I	Right Peds		A			
NB Rig	ht			EB	Right					
SB Rig	ht			WB	Right					
Green		14.0 56.				15.0	15.0			
Yellow		4.0 4.0				4.0	4.0			
All Red		1.0 1.0)			1.0	1.0			
		Inters	section Pe	erformand	ce Summa	Cycl arv	le Leng	jth:	120.0	secs
Appr/	Lane	Adj Sat	Rati		Lane G		 IqqA	oach		
Lane	Group	Flow Rat	.e							
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
Eastbou							****			
L	201	1719	0.18	0.12	48.3	D				
TR	2288	4902	0.71	0.47	21.8	С	22.4	С		
Westbou	nd									
L	207	1770	0.22	0.12	48.6	D				
TR	2297	4922	0.55	0.47		В	20.1	С		
Northbo	und									
LT	216	1730	0.43	0.13	49.9	D	49.5	D		
R	192	1538	0.33	0.13	49.0	D				
Southbo	und									
LT	225	1800	0.13	0.13	47.0	D	47.7	D		
R	198	1583	0.25			D	7/./	ט		
	Intersec	tion Dela				_	ction	LOS =	= C	

Analyst: VRPA Technologies Inter.: Magnolia/Mission Gorge

Agency: SDC Area Type: All other areas
Date: 4/2/07 Jurisd: San Diego County

Period: AM Year : 2012

Project ID: Existing + Cumulative + Project

R

356

1583

0.36

0.22

Intersection Delay = 57.2 (sec/veh) Intersection LOS = E

39.8

D

	: MISSI	on (Gorge				N/	S St: 1	Magno.	lia			
				sī	GNALI	ZED I	NTERS	ECTION	SUMM	ARY			
	1	Eas	stbour	nd	We	stbou	nd	l No:	rthbo	ınd	l Soi	ıthbo	und I
		L	T	R	L 	T	R	L	T	R	L	T	R
No. La	nes	2	2	1	<u> </u> 2	2	0	- i	2	1	1 2	2	!
LGConf	ig	L	${f T}$	R	L	TR		L	$^{-}_{ m T}$	R	L	T	RI
Volume	1	12	378	155	277	919	189	310	503		224	719	156
Lane W	idth 1	2.0	12.0	12.0	12.0	12.0		112.0			12.0		
RTOR V	ol			39			47	1		72	Ī		39 j
Durati	on 1	.00		Area				areas					
							Operat	cions					
	Combina 5	LIOI		2	3	4	'		5	6	7		8
EB Le			A	-			NB	Left	A				
Th:				A				Thru		A			
R10 Peo	ght da			A			ļ	Right		A			
			_]	Peds					
			A	~			SB	Left	A				
Th:				A			ļ	Thru		A			
	ght			A			ļ	Right	:	A			
Ped TP Pi								Peds					
	ght ght						EB	Right					
reen	Airc		15.0	43.0			WB	Right			_		
Yellow			4.0	4.0					15.0)		
All Red	-1		1.0	1.0					4.0	4.0			
*** 1,00	4		1.0	1.0					1.0	1.0 le Ler	ath.	120 (0 604
			In	terse	ction	Perf	ormano	e Summ	narv	-10 1101	19 011 .	120.	U sec
Appr/	Lane			Sat		tios			Group	Apr	roach		
ane	Group		Flow	Rate					_			_	
Grp	Capac	ity	(s)	v/c	g	/c	Delay	LOS	Dela	y Los		
Castboo											•••		
ı	417		333		0.29		.13	48.1	D				
	1234		344		0.33		.36	26.4	С	30.5	C		
{ •	567		158	3	0.22	0	.36	27.0	С				
Vestbou				_	_								
L	430		343		0.70		.13	55.5	E				
'R	1210		337	6	0.95	0	.36	57.2	Е	56.9) E		
orthbo			بمعر	_	_								
	417		333		0.81		.13	63.4	E				
	775		344		0.71		.22	45.8	D	51.6	i D		
} }	346		153	В	0.68	0	.22	48.1	D				
outhbo			2.40	pary .		_							
1	430		343		0.57		.13	51.2	D				
	798		354	1	0.98	0	. 22	92.8	F	78.2	E		
}	356		159	_	0.36	_	2.2	20.0					

Analyst: VRPA Technologies

Inter.: Magnolia/Mission Gorge

Agency: SDC
Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: PM Year : 2012

Project ID: Existing + Cumulative + Project

E/W St: Mission Gorge N/S St: Magnolia

SIGNALIZED	INTERSECTION	SUMMARY
		_

	Ea:	stbou	nd	We:	stbou	nd	l No.	rthbo	und	So	uthbo	und
	L	T	R	L	${f T}$	R	L	${f T}$	R	L	T	R
	1			_						i		
No. Lanes	2	2	1	1 2	2	0	_ 2	2	1	- i	2	1
LGConfig	L	${f T}$	R	L	TR		l L	${f r}$	R	L	T	R
Volume	176	899	394	245	671	152	392	893	304	1223	534	118
Lane Width	12.0	12.0	12.0	12.0	12.0		112.0	12.0	12.0	112.0		
RTOR Vol	1		99	1		38	1		76	1	,	30

Dur	ation	1.00	A	rea	Type:	All	ot	her	areas					
									ions					
Pha	se Comb	ination 1	Ļ	2	3	_	4			5	6	7	8	
EΒ	Left	Į	ł.				1	NB	Left	А	A		J	
	Thru			Α			İ		Thru		A	A		
	Right			A			1		Right		A	A		
	Peds						J		Peds					
WB	Left	I	A				1	SB	Left	A				
	Thru			A			ĺ		Thru			А		
	Right			A			ĺ		Right			A		
	Peds						ĺ		Peds					
NB	Right						i	EΒ	Right					
SB	Right						i	WB	Right					
Gre	en	1.5	0.0	35.0)		•		3	15.0	8.0	22.0		
Yel	low	4.	0	4.0						4.0	4.0	4.0		
All	Red	1.	0	1.0						1.0	1.0	1.0		

Cycle Length: 120.0 secs

		Interse	ction Pe	erformar	ice Summ	arv	.c neng	CII.	120.0	5605
Appr/ Lane	Lane Group	Adj Sat Flow Rate	Rati			Group	Appr	oach	***************************************	
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	Los	_	
Eastbo	und		7001		-					
L	417	3338	0.46	0.13	49.5	D				
${f T}$	1005	3445	0.97	0.29	76.8	E	65.9	E		
R	462	1583	0.69	0.29	42.4	D		_		
Westbou	und									
L	430	3437	0.62	0.13	52.5	D				
TR	983	3370	0.87	0.29	49.2	D	50.0	D		
Northbo	ound									
L	779	3338	0.55	0.23	41.2	D				
T	1005	3445	0.97	0.29	73.4	E	59.6	E		
R	449	1538	0.55	0.29	37.4	D		***		
Southbo	ound					_				
L	430	3437	0.56	0.13	51.1	D				
T	650	3547	0.89	0.18	65.4	E	59.3	E		
R	290	1583	0.33	0.18	43.3	D				
	Intersec	tion Delay	= 59.3	(sec/v	eh) Ir	nterse	ction :	LOS =	: E	

Analyst: VRPA Technologies

Inter.: Magnolia/Prospect Ave

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Year : 2012

Period: AM

Project ID: Existing Plus Cumulative Plus Project AM Peak Hour

E/W St: Prospect Ave

N/S St: Magnolia

			Ave											
				SI	GNALI:	ZED I	NTERSI	ECTION	SUMM	ARY				
	1	Eas	stbou	nd		stbou			thbo		Sol	ıthbo	und	T
	1	L	T	R	L	Т	R	L	T	R	L	T	R	l I
					ĺ			i –	_		_	<u> </u>	10	1
No. Lan	ies	1	2	1	1	2	2	- i	2	'i	2	2	1	_¦
LGConfi	.g	L	\mathbf{T}	R	L	${f T}$	R	L _	TR	, , , , , , , , , , , , , , , , , , ,	L	T	R	-
Volume	16	53	258	70	103	629	1204	42	12	39 i	569	409	145	1
Lane Wi	dth 1	2.0	12.0	12.0	12.0			112.0			12.0		12.0	
RTOR Vo				17	•		301			9	12.0	12.0	35	1
Duratio	n 1	.00		Area	Type:	All	other	areas						
					Sig	nal (Operat	ions						
Phase C		tion	1 1	2	3	4	1		5	6	7		8	
EB Lef			Α				NB	Left	A		•			
Thr				A			İ	Thru		А				
Rig	ht			A				Right		A				
Ped	ls						i	Peds		•-				
WB Lef	t		A				I SB	Left	A					
Thr	u			A			1	Thru		A				
Rig	ht			A			1	Right		A				
Ped				••			ł	Peds	•	A				
NB Rig							l l EB		70.					
								Right	. A.					
_	h+	-	71.				•	D: _1- +	~					
SB Rig	ht		A 15 A	27 N			WB	Right						
SB Rig Green	ht		15.0	37.0			•	Right	21.0					
SB Rig Green Yellow			15.0 4.0	4.0			•	Right	21.0 4.0	4.0				
SB Rig Green Yellow			15.0				•	Right	21.0 4.0 1.0	4.0 1.0				
SB Rig Green Yellow			15.0 4.0 1.0	4.0 1.0	7+ i 0 n	Dowf	WB	_	21.0 4.0 1.0	4.0		120.0) s	ecs
SB Rig Green Yellow All Red			15.0 4.0 1.0	4.0 1.0	ction	Perfo	WB	e Summ	21.0 4.0 1.0 Cyc	4.0 1.0 ele Len	gth:) s	ecs
SB Rig Green Yellow All Red Appr/	Lane		15.0 4.0 1.0 	4.0 1.0 ntersed	ction Ra	Perfo tios	WB	_	21.0 4.0 1.0 Cyc	4.0 1.0 ele Len) s	ecs
SB Rig Green Yellow All Red Appr/ Lane	Lane Group		15.0 4.0 1.0 In Adj	4.0 1.0 ntersed Sat Rate	Ra 	tios	WB	e Summ Lane	21.0 4.0 1.0 Cyc ary Group	4.0 1.0 ele Len	gth: roach) s	ecs
SB Rig Green Yellow All Red Appr/ Lane	Lane		15.0 4.0 1.0 In Adj	4.0 1.0 ntersed	ction Ra v/c	Perfo tios	WB	e Summ	21.0 4.0 1.0 Cyc ary Group	4.0 1.0 ele Len	gth:) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp	Lane Group Capac		15.0 4.0 1.0 In Adj	4.0 1.0 ntersed Sat Rate	Ra 	tios	WB	e Summ Lane	21.0 4.0 1.0 Cyc ary Group	4.0 1.0 ele Len	gth: roach) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp	Lane Group Capac		15.0 4.0 1.0 In Adj	4.0 1.0 ntersed Sat Rate	Ra v/c	tios g,	ormanc	e Summ Lane Delay	21.0 4.0 1.0 Cyc ary_ Group	4.0 1.0 ele Len	gth: roach) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp	Lane Group Capac nd 215	ity 	15.0 4.0 1.0 Ir Adj Flow (4.0 1.0 ntersection Saturate (s)	0.32	tios g/ 0.	ormanc	e Summ Lane Delay	21.0 4.0 1.0 Cyc ary_ Group LOS	4.0 1.0 le Len App	gth: roach y LOS) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou	Lane Group Capac nd 215 1062	ity 	15.0 4.0 1.0 Ir Adj Flow (171 344	4.0 1.0 ntersed Sat Rate (s)	v/c 0.32 0.26	tios g/ 0.) WB	e Summ Lane Delay 48.7 30.7	21.0 4.0 1.0 Cyc ary_ Group LOS D C	4.0 1.0 ele Len	gth: roach) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou L	Lane Group Capac nd 215 1062 831	ity 	15.0 4.0 1.0 Ir Adj Flow (4.0 1.0 ntersed Sat Rate (s)	0.32	tios g/ 0.	ormanc	e Summ Lane Delay	21.0 4.0 1.0 Cyc ary_ Group LOS	4.0 1.0 le Len App	gth: roach y LOS) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou L	Lane Group Capac nd 215 1062 831	ity 	15.0 4.0 1.0 Ir. Adj Flow (171 344 158	4.0 1.0 ntersed Sat Rate (s)	0.32 0.26 0.07	0. 0.) WB	e Summ Lane Delay 48.7 30.7 14.1	21.0 4.0 1.0 Cycary_ Group LOS D C	4.0 1.0 le Len App	gth: roach y LOS) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou L	Lane Group Capac nd 215 1062 831 nd 221	ity ———	15.0 4.0 1.0 In Adj Flow (171 344 158	4.0 1.0 ntersec Sat Rate (s)	0.32 0.26 0.07	0. 0.	7C .13 .31 .52	e Summ Lane Delay 48.7 30.7 14.1	21.0 4.0 1.0 Cyc ary Group LOS D C B	4.0 1.0 ele Len App Dela	gth: roach y LOS C) s	2C S
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou L F R Westbou	Lane Group Capac nd 215 1062 831 nd 221 1062	ity ———	15.0 4.0 1.0 Ir Adj Flow (171 344 158	4.0 1.0 ntersec Sat Rate (s)	0.32 0.26 0.07 0.51 0.64	0. 0. 0.	7C .13 .31 .52	e Summ Lane Delay 48.7 30.7 14.1 51.0 36.4	21.0 4.0 1.0 Cyc ary Group LOS D C B	4.0 1.0 le Len App	gth: roach y LOS C) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou L T R Westbou	Lane Group Capac nd 215 1062 831 nd 221 1062 1429	ity ———	15.0 4.0 1.0 In Adj Flow (171 344 158	4.0 1.0 ntersec Sat Rate (s)	0.32 0.26 0.07	0. 0. 0.	7C .13 .31 .52	e Summ Lane Delay 48.7 30.7 14.1	21.0 4.0 1.0 Cyc ary Group LOS D C B	4.0 1.0 ele Len App Dela	gth: roach y LOS C) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou L I' R Westbou	Lane Group Capac nd 215 1062 831 nd 221 1062 1429 und	ity ———	15.0 4.0 1.0 Ir Adj Flow (171 344 158 177 344 272	4.0 1.0 ntersed Sat Rate (s) 9 5	0.32 0.26 0.07 0.51 0.64 0.69	0. 0. 0. 0.	7C .13 .31 .52 .13	e Summ Lane Delay 48.7 30.7 14.1 51.0 36.4 22.6	21.0 4.0 1.0 Cyc ary_ Group LOS D C B D C	4.0 1.0 ele Len App Dela	gth: roach y LOS C) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou L T R Westbou L T R Northbook	Lane Group Capac nd 215 1062 831 nd 221 1062 1429	ity ———	15.0 4.0 1.0 Ir Adj Flow (171 344 158	4.0 1.0 ntersed Sat (Rate (s) .9 5 13	0.32 0.26 0.07 0.51 0.64	0. 0. 0. 0.	7C .13 .31 .52	e Summ Lane Delay 48.7 30.7 14.1 51.0 36.4 22.6	21.0 4.0 1.0 Cyc ary_ Group LOS D C B D C D	4.0 1.0 le Len App Dela 31.4	gth: roach y Los C) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou L T R Westbou L I R Northbou	Lane Group Capac nd 215 1062 831 nd 221 1062 1429 und 301 692	ity ———	15.0 4.0 1.0 Ir Adj Flow (171 344 158 177 344 272	4.0 1.0 ntersec Sat Rate (s) .9 .5 .3	0.32 0.26 0.07 0.51 0.64 0.69	0. 0. 0. 0.	7C .13 .31 .52 .31 .52	e Summ Lane Delay 48.7 30.7 14.1 51.0 36.4 22.6	21.0 4.0 1.0 Cyc ary_ Group LOS D C B D C	4.0 1.0 ele Len App Dela	gth: roach y Los C) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou L R Westbou I R Northbor	Lane Group Capac nd 215 1062 831 nd 221 1062 1429 und 301 692	ity ———	15.0 4.0 1.0 Ir Adj Flow (171 344 158 177 344 272 171 307	4.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	0.32 0.26 0.07 0.51 0.64 0.69	0. 0. 0. 0.	7C .13 .31 .52 .13 .31 .52	e Summ Lane Delay 48.7 30.7 14.1 51.0 36.4 22.6 42.2 36.6	21.0 4.0 1.0 Cyc ary Group LOS D C B D D D D	4.0 1.0 le Len App Dela 31.4	gth: roach y Los C) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou L F R Westbou L F R Northbor L F R Southbor	Lane Group Capac nd 215 1062 831 nd 221 1429 und 301 692 und 601	ity ———	15.0 4.0 1.0 Ir Adj Flow (171 344 158 177 344 272 171 307	4.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	0.32 0.26 0.07 0.51 0.64 0.69 0.15 0.07	0. 0. 0. 0. 0.	7C .13 .31 .52 .13 .31 .52	e Summ Lane Delay 48.7 30.7 14.1 51.0 36.4 22.6 42.2 36.6	21.0 4.0 1.0 Cyc ary Group LOS D C B D C D D F	4.0 1.0 le Len App Dela 31.4	gth: roach y Los C) s	ecs
SB Rig Green Yellow All Red Appr/ Lane Grp Eastbou L T R Westbou L I R Northbor L IR Southbou	Lane Group Capac nd 215 1062 831 nd 221 1429 und 301 692 und 601 798	ity ———	15.0 4.0 1.0 Ir Adj Flow (171 344 158 177 344 272 171 307	4.0 1.0 ntersection Saturate (s) 9 (5) 2 (9) 5 (2) 9 (5)	0.32 0.26 0.07 0.51 0.64 0.69 0.15 0.07	0. 0. 0. 0. 0.	7C .13 .31 .52 .13 .31 .52 .17 .22	e Summ Lane Delay 48.7 30.7 14.1 51.0 36.4 22.6 42.2 36.6	21.0 4.0 1.0 Cyc ary Group LOS D C B D C D D F	4.0 1.0 le Len App Dela 31.4	gth: roach y LOS C) s	ecs
_	Lane Group Capac nd 215 1062 831 nd 221 1429 und 301 692 und 601 798 620	ity	15.0 4.0 1.0 Ir Adj Flow (171 344 158 177 344 272 171 307	4.0 1.0 ntersection Saturate (s) 9 (5) 2 (9) 5 (2) 9 (5)	0.32 0.26 0.07 0.51 0.64 0.69 0.15 0.07	0. 0. 0. 0. 0. 0.	7C .13 .31 .52 .13 .31 .52	e Summ Lane Delay 48.7 30.7 14.1 51.0 36.4 22.6 42.2 36.6	21.0 4.0 1.0 Cyc ary Group LOS D C B D C D D F	4.0 1.0 le Len App Dela 31.4 29.7	gth: roach y LOS C) s	ecs

Analyst: VRPA Technologies

Inter.: Magnolia/Prospect Ave Area Type: All other areas

Agency: SDC Date: 4/2/07

Jurisd: San Diego County

Period: PM

Year : 2012

Project ID: Existing Plus Cumulative Plus Project PM Peak Hour

E/W St: Prospect Ave

N/S St: Magnolia

E/W St: Prospect	t Ave		N/S	S St: Ma	agnoli	a			
	SI	GNALIZED	INTERSE	CTION S	SUMMAF	RY			
Ea	astbound	Westbo			thbour		South	bound	1
l I	T R	L T	R	L	T	R	L 3		i
No. Lanes	1 2 1	1 1 2	2 2		2	[2	2 1	<u> </u>
LGConfig L	T R	•	r R	L	TR		L	T R	
Volume 100		141 512		•		.48 1	1006 30		l I
•		12.0 12				•	12.0 12) }
RTOR Vol	14		325	1		17	12.0 12	19	
Duration 1.00	O Area	Type: Ali	l other	areas			·		<u> </u>
		Signal	l Operat					, ,	
Phase Combination		3	4	_	5	6	7	8	
EB Left	A		NB	Left	A	Α			
Thru	A		ļ	Thru		Α	A		
Right	A		ļ	Right		Α	A		
Peds	_			Peds	_				
WB Left	A		SB	Left	A.		_		
Thru	A		!	Thru			A		
Right Peds	А		1	Right			A		
NB Right			l mm	Peds	~	-			
SB Right			EB	Right	A	A			
Green	15.0 30.0		WB	Right	A 20 0	0 0	22 0		
Yellow	4.0 4.0				20.0	8.0 4.0	22.0 4.0		
All Red	1.0 1.0				1.0	1.0	1.0		
AII KEG	1.0 1.0							0 0 -	
	Interse	ction Per	formanc	e Summa		е пепо	th: 12	0.0 8	secs
Appr/ Lane	——— Adj Sat	Ratio		Lane G		Appr	oach		·
Lane Group	Flow Rate				"				
Grp Capacity	y (s)	v/c	g/C	Delay	LOS	Delay	LOS	-	
Eastbound					*			***************************************	
L 215	1719	0.51	0.13	51.0	D				
T 861	3445	0.94	0.25	69.0	E	64.3	E		
R 897	1583	0.05	0.57	11.6	В				
Westbound									
L 221	1770	0.69	0.13	59.7	E				
T 861	3445	0.65	0.25	42.0	D	39.3	D		
R 1248	2722	0.85	0.46	34.9	С				
Northbound									
L 473	1719	0.20	0.28	33.6	С				
TR 977	3349	0.61	0.29	37.4	D	36.8	D		
Southbound									
L 573	3437		0.17	1690	F				
T 650	3547		0.18	44.9	D	1251	F		
R 290	1583	0.21	0.18	42.0	D				

Intersection Delay = 411.5 (sec/veh) Intersection LOS = F

Analyst: VRPA Technologies

Inter.: Magnolia/ Riverview Pkwy

Agency: SDC Area Type: All other areas Date: 4/2/07 Jurisd: San Diego County Period: AM

Year : 2013

Project ID: Existing + Cumulative + Project AM Peak Hour E/W St: Riverview Pkwy N/S St: Magnolia

		S	IGNALIZE	D INTERSI	ECTION	SUMMA	RY				
	•	stbound	West	bound		thbou		Sou	thbo	und	
	L	T R	L	T R	L	${f T}$	R	L	T	R	l
No. Land LGConfid Volume Lane Wid RTOR Vol	g L 120 dth 12.0	0 1 R 57 12.0 14	O	0 0	1 L 59 12.0	3 T 386 12.0			3 T 450 12.0	1 R 178 12.0 45	
Duration	n 1.00	Area	Type: A	ll other	areas		——————————————————————————————————————				
Dham C		1 0		al Operat	ions		····				
EB Left Thru Righ	u ht	n 1 2 A A	3	4 NB 	Left Thru Right Peds	5 A A	6 A	7	}	3	
WB Left Thru Righ Peds	t u ht			SB 	Left Thru Right Peds		A A				
NB Righ		7. 0		EB WB	Right Right						
Green Yellow		35.0 4.0				22.0	48.0				
All Red		1.0				4.0 1.0 Cycl	4.0 1.0 Le Lena	th: 1	.20.0) se	°C5
All Red Appr/	Lane	1.0 Interse Adj Sat	Rati	erformanc	e Summa Lane (1.0 Cycl ary	1.0 Le Leng	th: I	120.0) s∈	ecs
All Red		1.0 Interse	Rati			1.0 Cycl ary Group	1.0 Le Leng	oach	20.0) se	ecs
All Red Appr/ Lane	Lane Group Capacity	1.0 Interse Adj Sat Flow Rate	Rati	.os	Lane (1.0 Cycl ary Group	1.0 Le Leng Appr Delay	LOS	20.0) se	ecs
Appr/Lane Grp	Lane Group Capacity nd 501 462	Interse Adj Sat Flow Rate (s)	Rati	.os g/C	Lane (1.0 Cyclary Group LOS	1.0 Le Leng Appr	oach	20.0) se	ecs
All Red Appr/ Lane Grp Eastbour L	Lane Group Capacity nd 501 462	1.0Interse Adj Sat Flow Rate (s)1719	Rati	.os g/C 0.29	Delay 32.9	1.0 Cyclary Group LOS	1.0 Le Leng Appr Delay	LOS	20.0) se	ecs
All Red Appr/ Lane Grp Eastbour L R Westbour	Lane Group Capacity nd 501 462 nd	1.0Interse Adj Sat Flow Rate (s)1719 1583	0.27	.os g/C 0.29 0.29	32.9 31.1	1.0 Cyclary Group LOS C	1.0 Le Leng Appr Delay	LOS	20.0) se	ecs
All Red Appr/ Lane Grp Eastbour L R Westbour	Lane Group Capacity nd 501 462	1.0Interse Adj Sat Flow Rate (s)1719	0.27	.os g/C 0.29 0.29	32.9 31.1	1.0 Cyclary Group LOS	1.0 Le Leng Appr Delay	oach LOS C	20.0) se	ecs
All Red Appr/ Lane Grp Eastbour L R Westbour	Lane Group Capacity nd 501 462 nd and 315 3081	1.0Interse_Adj Sat Flow Rate (s)17191583	0.27 0.10	.os g/C 0.29 0.29	32.9 31.1	1.0 Cyclary Group LOS C	1.0 Le Leng Appr Delay	oach LOS C	20.0) se	ecs
All Red Appr/ Lane Grp Eastbour L R Westbour Northbou L T	Lane Group Capacity nd 501 462 nd 315 3081 and 2030 633	1.0Interse_Adj Sat Flow Rate (s)17191583	0.27 0.10 0.21 0.14	0.29 0.29 0.18 0.63	32.9 31.1 41.9 4.7	1.0 Cyclary	1.0 Le Leng Appr Delay	C C) se	ecs

Analyst: VRPA Technologies

Inter.: Magnolia/Riverview Pkwy

Agency: SDC Area Type: All other areas
Date: 4/2/07 Jurisd: San Diego County
Period: PM Year : 2013

Period: PM Year : 2013
Project ID: Existing + Cumulative + Project PM Peak Hour
E/W St: Riverview Pkwy N/S St: Magnolia

	STO	SNALTZE	D INTERSI	ECTTON	CHIMMA	DV			
Eas	tbound		bound		thbou		Contbb		
L	T R		T R	F	Т	R	South) L T	R	
No. Lanes 1 LGConfig L Volume 197 Lane Width 12.0 RTOR Vol	0 1 R 65 12.0 16	0	0 0	1 L 71 12.0	3 T 500 12.0	0	0 3 429 12.	. R	
Duration 1.00	Area 1		ll other						
Di-			al Operat	tions					
Phase Combination EB Left	1 2 A	3	4 NB	Left	5 A	6	7	8	
Thru Right	A			Thru Right	A	A			
Peds				Peds	-				
WB Left Thru			SB	Left					
Right			ļ	Thru Right		A			
Peds			 	Peds	•	A			
NB Right			, I EB	Right					
SB Right			WB	Right					
	42.0				21.0	42.0			
	4.0				4.0	4.0			
All Red	1.0				1.0	1.0			
	Intersec	tion De	erformanc	o Cumm	CACT	e Lend	gth: 120	.0 secs	
Appr/ Lane	Adj Sat	Rati	ios		Group	Δηηι	roach		
Lane Group	Flow Rate			241.0	GIGUP	11PP1	Loacii		
Grp Capacity	(s)	v/c	g/C	Delay	LOS	Delay	/ LOS		
Eastbound									
L 602	1719	0.36	0.35	29.4	С	28.8	0		
R 554	1583	0.10	0.35	26.3	С	20.0	С		
Westbound									
Northbound									
	1719	0 26	0 17	40 a	Б				
T 2793	4929	0.20	0.17	8 3 43.3	7). D	12 6	В		
Southbound		3.23	0.07	0.5	n	12.0	D		
T 1776	5074	0.27	0.35	26.5	С	26.7	С		
R 554	1 5 0 0	~ ~ ~							
T 10	1583 Lion Delay	0.20	0.35	27.4	С				

TWO-WAY STOP CONTROL SUMMARY____

Analyst:

VRPA Technologies

Agency/Co.:

Date Performed:

3/12/2008

Analysis Time Period: AM

Intersection: Riverview Parkway / Pr Drive

Jurisdiction: City of Santee

Units: U. S. Customary

2013

Analysis Year:

Project ID: Ex + Cum + Project

East/West Street: Riverview Parkway

North/South Street: Project Driveway

Intersection Orientation: EW

Intersection C	rientation	: EW		St	udy	period	d (hrs):	: 0.25
MIA	Vel	hicle Vol	umes and	d Adjus	stme	nts		
Major Street:	Approach		stbound				tbound	
	Movement	1	2	3	1	4	5	6
		${f L}$	T	R	-	L	Т	R
Volume			164	7		17	220	
Peak-Hour Fact	or, PHF		1.00	1.00		1.00	1.00	
Hourly Flow Ra			164	7		17	220	
Percent Heavy	Vehicles					0		
Median Type/St	orage	Undiv	ided			/		
RT Channelized	3			No				
Lanes			2 1	_		1	2	
Configuration			T R			L	T	
Upstream Signa	1?		No			_	No	
	*** <u></u>							
Minor Street:	Approach		rthbound			Sou	thbound	
	Movement	7	8	9		10	11	12
		${f L}$	T	R	ļ	L	${f T}$	R
Volume		6		13				
Peak Hour Fact	or, PHF	1.00		1.00				
Hourly Flow Ra	te, HFR	б		13				
Percent Heavy	Vehicles	0		0				
Percent Grade			0				0	
Flared Approac	h: Exists?	/Storage			1		J	,
Lanes		1	1		•			,
Configuration		L	R					
					—			
		Queue Ler	ngth, an	d Leve	1 o	f Servi	ce	
Approach	EB	WB	Nort	hbound			South	bound
Movement	1	4	7	8	9	1	0 1	1 12
Lane Config		T. 1	T.		D	1		

Approach	_Delay, EB	Queue WB	Le		and Lev		Ser		Southbound	
Movement	1	4	1	7	8	9	1	10	11	12
Lane Config		L	İ	L		R	i		* *	12
v (vph)	······································	17		6		13				
C(m) (vph)		1418	3	657		968				
v/c		0.01	L	0.01		0.01				
95% queue length		0.04	1	0.03		0.04				
Control Delay		7.6		10.5		8.8				
LOS		A		В		A				
Approach Delay					9.3					
Approach LOS					Α					

TWO-WAY STOP CONTROL SUMMARY____

Analyst:

VRPA Technologies

Agency/Co.:

Date Performed:

3/12/2008

Analysis Time Period: PM

Intersection: Riverview Parkway / Pr Drive

Jurisdiction: City of Santee

Units: U. S. Customary

Analysis Year: 2013 Project ID: Ex + Cum + Project

Control Delay

Approach Delay

Approach LOS

LOS

East/West Street: Riverview Parkway

North/South Street: Project Driveway

7.8

A

11.2

В

9.7

A

9.0

A

Intersection Orie		ject Dr EW	iveway	S	tudy	period	(hrs):	0.25
	Veh	icle Vo	lumes and	d Adin	stme:	nte		
Major Street: App	oroach		astbound	٠.٠٠٠ ١.٠٠	o chic.		tbound	
•	vement	1	2	3	1	4	5	6
		L	Т	R	į	L	T	R
Volume			253	9		21	183	
Peak-Hour Factor,	PHF		1.00	1.00		1.00	1.00	
Hourly Flow Rate,	HFR		253	9		21	183	
Percent Heavy Veh:	icles					0		→ ***
Median Type/Storac		Undi	vided			/		
RT Channelized?	-			No	•			
Lanes			2	-		1	2	
Configuration			T R	-		L	T	
Jpstream Signal?			No			3.1	No	
-							NO	
	oroach	Ne	orthbound	i		Sou	thbound	
roM	/ement	7	8	9	- 1	10	11	12
		L	${f T}$	R	1	L	${ m T}$	R
/olume		8		18			****	
Peak Hour Factor,	סטס	1.00		1.00				
Hourly Flow Rate,		8						
Percent Heavy Vehi		0		18				
Percent Heavy vehi Percent Grade (%)	cres	U	0	0			_	
	n.i	/ 0 +	0				0	
lared Approach: Janes	Exists?/	-			/			/
-		1_	_ 1					
Configuration			G R					
	Delay, Q	ueue Le	ength, an	d Lette	ıl of	Servi		M
pproach	EB	WB		hbound		. nervi	South	20und
lovement	1	4 1	7	8	9] 1(
ane Config	_	L i	L	J	R	1		1 12
(vph)		21	8		18		····	
(m) (vph)		1314	585					
./c		0.02			907			
5% queue length		0.02	0.01		0.0			
So queue rengen		0.03	0.04		0.0	ь		

Analyst: VRPA Technologies

Agency: SDC

Date: 4/2/07 Period: AM

Project ID: Future No Project

Inter.: Cuyamaca/Town Center Area Type: All other areas Jurisd: San Diego County

Year : 2030

	Town Cen	re no Proje ter	:CT	N/S	St: 0	Cuyama	ca			
		SI	GNALIZE	D INTERSE	CTION	SIIMMA	RY			
	Ea:	stbound		bound		thbou		Sou	thbound	i
	L 	T R	L 	T R	L	T	R	L	T F	•
No. Lane		2 1	2	2 1	i 2	3	'	2	3 1	' .
LGConfig	-	T R	L	T R	L	${f T}$	R	L	${f T}$	R j
Volume	168	366 95		84 279	85			364	708 32	1
Lane Wid	•	12.0 12.0	12.0 1		12.0	12.0	12.0	12.0	12.0 12	.0
RTOR Vol	L	24	J	70	1	:	32		80	
Duration	n 1.00	Area		ll other						
Dhage Co		_ 1		al Operat	ions					
EB Left	ombination -		3	4		5	6	7	8	
fb Leri Thri		A		NB	Left	A				
Righ		A		ļ	Thru		A			
Peds		A			Right	•	A			
WB Left		A		1	Peds	7				
Thru		A		SB	Left	A	_			
Righ		A		 	Thru		A			
Peds		A		1	Right	•	A			
NB Righ		A		l I EB	Peds Right	- 70				
SB Righ		A		J WB	Right					
Green		17.0 30.0		1 MD	KIGIIC	23.0	30.0			
Yellow		4.0 4.0				4.0	4.0			
All Red		1.0 1.0				1.0	1.0			
						Cyc]	e Len	gth:	120.0	secs
		Interse		erformanc		ary				
Appr/ Lane	Lane	Adj Sat	Rati	ios	Lane	Group	App	roach		
Grp	Group Capacity	Flow Rate	v/c	~/~	D-1					
GIP	capacity	(s)	V/C	g/C	Delay	LOS	Dela	y Los		
Eastboun	nd									
L	473	3338	0.40	0.14	47.4	D				
T	861	3445	0.47	0.25	38.7	D	38.5	D		
R	765	1583	0.10	0.48	16.9	В				
Westboun										
L	487	3437	0.52	0.14	48.6	D				
T	861	3445	0.88	0.25	55.5	E	47.3	D		
R	743	1538	0.31	0.48	19.1	В				
Northbou		2225	A							
L T	640	3338	0.15	0.19	40.4	D				
R	1232 666	4929	0.42	0.25	37.9	D	35.7	D		
Southbou		1538	0.16	0.43	20.8	С				
L	659	3437	0 61	0 10	10 3	_				
T	1269	5074	0.61	0.19	46.1	D	20.5	_		
R	686	1583	0.62 0.39	0.25	40.9	D	39.2	D		
		tion Delay			23.6	C	لا هم	T 0.5	5	
	T11CGT 2GC	rron nerdà	- 40.9	(sec/ver	1) <u>T</u> 1	nterse	ction	LOS =	= D	

Analyst: VRPA Technologies

Agency: SDC Date: 4/2/07

Period: PM

Project ID: Future No Project

E/W St: Town Center

Inter.: Cuyamaca/Town Center Area Type: All other areas Jurisd: San Diego County

Year : 2030

N/S St: Cuyamaca

	Eas	stbou	nd	We:	stbou	nd	No:	rthbo	und	l Soi	ıthboı	und
	L 	T	R	L	T	R	L 	Т	R	<u>L</u>	Т	R
No. Lanes	1 2	2	1	i 2	2	1	-	3	1	-¦2	3	1
LGConfig	L	${f T}$	R] L	${f T}$	R	L	Т	R	L	T	R
Volume	•		372		102	355	286	889	250	1219	907	361
Lane Width	112.0	12.0	12.0	12.0	12.0	12.0	112.0	12.0	12.0	112.0		
RTOR Vol	1		93	1		89	1		63	i		90

Dur	ation	1.00	Area	Type: Al	ll other	areas					
	·····			Signa	al Operat	ions					
Pha	se Combi	nation 1	2	3	4		5	6	7	8	
EΒ	Left	A	A		NB	Left	A				
	Thru		Α	A	1	Thru		A			
	Right		Α	А	1	Right		А			
	Peds				1	Peds					
WB	Left	A			SB	Left	A				
	Thru			A	ĺ	Thru		A			
	Right			A	ĺ	Right		A			
	Peds				ĺ	Peds					
NB	Right				EB	Right	A				
SB	Right				WB	Right					
Gre	en	13.0	8.0	22.0		-	20.0	32.0			
Yel	low	4.0	4.0	4.0			4.0	4.0			
All	Red	1.0	1.0	1.0			1.0	1.0			

Cycle Length: 120.0 secs Intersection Porforman

7					ice Summa				
Appr/	Lane	Adj Sat	Rati	ios	Lane (Group	Approach		
Lane	Group	Flow Rate							
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	_
Eastbo	15d								
L	723	3338	0.20	0.22	38.7	D			
${f T}$	1005	3445	0.10	0.29	30.8	С	26.3	С	
R	792	1583	0.39	0.50	19.0	В			
Westboo	ınd								
L	372	3437	0.42	0.11	50.8	D			
T	632	3445	0.18	0.18	41.5	D	133.4	F	
R	282	1538	1.05	0.18	212.2	F			
Northbo	ound								
L	556	3338	0.57	0.17	47.5	D			
T	1314	4929	0.75	0.27	42.9	D	43.2	D	
R	410	1538	0.51	0.27	38.4	D		_	
Southbo	ound					_			
L	573	3437	0.42	0.17	45.3	D			
T	1353	5074	0.75	0.27	42.6	D	43.6	D	
R	422	1583	0.71		45.6	D	-	-	
	Intersec	tion Delay	= 53.3	(sec/v	eh) In	terse	ction I	os =	D

Analyst: VRPA Technologies

Agency: SDC Date: 4/2/07

Period: AM

Project ID: Future no Project

Inter.: Cuyamaca/Mission Gorge

Area Type: All other areas Jurisd: San Diego County

Year : 2030

E/W St: Mis	sion Go		110)	C C		N/S	s st: 0	Cuyama	aca				
				GNALI	ZED II	NTERSE	ECTION	SUMM	ARY				
	East	boun	d	Wes	stbou	nd	Noi	rthboi	ınd	Sou	thboi	und	I
	L 	T	R	L	T	R	L	Ţ,	R	L	Т	R	; [
No. Lanes	2	3	1	1 2	3	1	- i2	2	0	2	3	0	¦
LGConfig	L	${f T}$	R	L	${f T}$	R	L	TR		L	TR	Ü	1
Volume	138 6	10	262	155	1084	102	347	235	48	169	562	74	i
	12.0 1	2.0	12.0	112.0	12.0	12.0	112.0			12.0		, -	i
RTOR Vol	I		65			25	1		12			19	1
Duration	1.00		Area '				areas						
Dhage C!		1				Operat	ions						
Phase Combi			2	3	4			5	6	7	8	}	
EB Left		A	79			NB	Left	A	А				
Thru			A			1	Thru		A	A			
Right			A			1	Right	-	A	A			
Peds		_				i	Peds						
WB Left	•	A				SB	Left	Α					
Thru			A				Thru			Α			
Right			A			l	Right	-		A			
Peds							Peds						
NB Right						EB	Right	. A	Α				
SB Right						WB	Right	. A					
Green		4.0	42.0					14.0	8.0	17.	0		
Yellow		.0	4.0					4.0	4.0	4.0			
All Red	1	.0	1.0					1.0	1.0	1.0			
								Сус	le Len	gth:	120.0	5	secs
7 -						rmanc	e Summ						
Appr/ Lane		_	Sat	Ra	tios		Lane	Group	App	roach			
Lane Grou	_		Rate			_							
Grp Capa	acity	(:	s)	V/C	g/	С	Delay	LOS	Dela	y Los			
Eastbound								**					
L 389	9	3338	3	0.39	0.	12	49.7	D					
T 172	25	4929	9	0.39		35	27.9	c	27.4	С			
R 976	5	1583		0.22		62	10.3	В		0			
Westbound					- •	_	•	_					
L 401	<u>.</u>	3437	7	0.43	0.	12	50.0	D					
T 172		4929		0.70			32.9	C	33.9	С			
R 782		1538		0.11			15.4	В	33.3	C			
Northbound		_			٠.	- -	-~	ב					
Ĺ 751		3338	3	0.51	0.	22	41.4	D					
TR 844		3377		0.36			37.3	D	39.6	D			
Southbound													
L 401		3437	7	0.47	0.	1 2	5 O 4						
TR 709		5006		0.47			50.4 92.2	D	02.0	-			
, , , ,	•	5500	•	0.51	υ.	T 4	34.4	F	83.2	F			

Intersection Delay = 43.8 (sec/veh) Intersection LOS = D

Analyst: VRPA Technologies

Inter.: Cuyamaca/Mission Gorge Area Type: All other areas

Agency: SDC Date: 4/2/07

Jurisd: San Diego County

Period: PM

Year : 2030

Project ID: Future No Project

E/W St. Mission Gorge

E/W S	St: Mis	sion	Gorge	_			N/:	5 St: (Cuyama	aca				
				SI	GNALI	ZED II	NTERSI	ECTION	SUMMA	ARY				
		i Ea	stbou			stbou			rthbou		Soı	ıthbou	nd	<u>-</u>
		L 	T	R	L 	T	R	L	T	R	L	T	R	
No. L] 2	3	1	1 2	3	1	- i	2	i	2	3		-¦
LGCon	_	i L	${f T}$	R	L	${f T}$	R	L	TR	j	L	TR	-	i
Volum		1507	1677	328	1250	1017	178	1720	715	185	499	743	124	Ì
Lane RTOR	Width	112.0	12.0	12.0 82	12.0	12.0		112.0	12.0		12.0			
		·			 		45			47			32	1
Durat	ion	1.00		Area			other Operat	areas			1700.			
Phase	Combi	natio	n 1	2	3	4			5	6	7	8		
	eft		A				NB	Left	Ā	•	•	Ü		
	'hru			A			1	Thru		A				
	light			A			1	Right	;	А				
	eds						1	Peds						
	eft		A				SB	Left	A					
	hru			A			1	Thru		A				
	ight eds			A			[Right	-	A				
	ight.							Peds						
	ight.						EB	Right						
Green	_		22.0	30.0			WB	Right		00.0				
Yello			4.0	4.0					25.0					
All R			1.0	1.0					4.0	4.0 1.0				
										le Leng	ηth:	120 0	e:	ecs
			In	terse	ction	Perfo	rmanc	e Summ	ary		,	120.0	٥.	
Appr/ Lane	Lan Gro		Adj	Sat Rate		tios			Group	Appı	roach			
Grp	Cap	acity	(s)	v/c	g/	C	Delay	LOS	Delay	y LOS			
Eastb	ound		****											
Ļ	61:		333	8	0.92	0.	18	73.3	E					
\mathbf{T}	12.		492		1.51	0.	25	971.2	F	687.5	5 F			
R	.79	2	158	3	0.34	0.	50	18.4	В					
Westb		•		_	_									
L	630			7	0.44	0.	18	44.0	D					
T	123		492		0.92	0.	25 50	56.8		50.7	D			
R Northl	769	9	123	8	υ.19	0.	50	16.7	В					
L		5	333	8	1 1 5	0	21	222 0	***					
	64			2	1.15 1.47		21 19			C 4 4 . C	· -			
		-	550	ے.	T • 4 /	υ.	1 J	904.0	Ľ.	644.8	s F,			
South		_												
L			343	7	0.77	0.	21	50.3	D					
TR	956	5	499	0	0.97	0.	19	83.7	F	71.2	E			
	Int	tersec	tion	Delay	= 423	.1 (s	ec/vel	h) Ii	nters	ection	LOS =	= F		

Analyst: VRPA Technologies

Inter.: Cottonwood/Mission Gorge

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: AM

Year : 2030

Project ID: Future No Project

E/W St: Mission Gorge

N/S St: Cottonwood

_,		00190		147.5	, DC. (20 [[011/	wood			
W		SI	GNALIZE	D INTERSE	CTION	SUMMAI	RY			
	•	stbound		bound	Noi	thbour	nd	Sou	thbound	
	L 	T R	 T ;	T R	L 	Т	R	L	T R	.
No. Lan		3 0	1	3 0	- i		ō		1 1	¦
LGConfi	_	TR	L	TR	L	TR	i			R İ
Volume	130			55 12	132		140	13	6 46	•
Lane Wie	•		12.0 12		12.0	12.0			12.0 12	.0
RTOR Vo.	1	9	1	3	I	3	35		12	I
Duration	n 1.00	Area '		ll other						
Phase Co	ombinatio:	n 1 2	signa 3	al Operat 4 I	lons	5				
EB Left		Α	3	I NB	Left	A A	6	7	8	
Thri		A		1	Thru	A				
Rigl	ht	A		i	Right					
Ped	s			i	Peds					
WB Left	t	A		i SB	Left		Α			
Thru	u	A		İ	Thru		A			
Rigl	ht	A		İ	Right		A			
Peds				1	Peds					
NB Righ				EB	Right					
SB Righ	ht			WB	Right					
Green		14.0 56.0				15.0	15.0			
Yellow All Red		4.0 4.0				4.0	4.0			
AII REU		1.0 1.0				1.0	1.0			
		Intersed	rtion De	erformanc	- C.1mm	CACT	e Len	gth:	120.0	secs
Appr/	Lane	Adj Sat	Rati			ary Group	Z nn:	roach		
Lane	Group	Flow Rate	114.51	.00	пане	Group	App.	LUacii		
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Dela	y LOS		
		···								
Eastbour L	na 201	1719	0.16	0.12	48.1	D				
TR	2287	4900	0.25	0.12	15.8	D B	17.6	Б		
		1300	0.2.0	0.11	10.0	ь	17.0	В		
Westbour										
Γ	207	1770	0.29		49.2	D				
TR	2296	4921	0.42	0.47	17.4	В	19.2	В		
Northbou	ınd									
L	215	1719	0.68	0.13	59.3	E				
TR	196	1571	0.68	0.13	59.7	Ε	59.5	E		
Southbou	ınd									
LT	225	1803	0 00	0 12	46 3	-	47 ~	_		
R	198	1583	0.09	0.13	46.7	D	47.2	D		
		tion Delay	0.19		47.5	D	a+i	T 0.0		
	#***CCTDCC	cron peray	۷.3	(Sec) vei	1) II	nterse	CLION	TOS =	= C	

Analyst: VRPA Technologies

Inter.: Cottonwood/Mission Gorge

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: PM

Year : 2030

Project ID: Future No Project

E/W St: Mission Gorge

N/S St: Cottonwood

		50		147.	J J.L. (OLEON	wood			
		SI	GNALIZE	D INTERSE	ECTION	SUMMA	RY			
	Ea	stbound		bound		thbou		Sou	thbound	i i
	 L	T R	l L	T R	L 	Т	R I	L		R
No. Lane	• –	3 0	1 1	3 0	- <u>'</u>	1	ˈ	0		¦
LGConfig	•	TR	ļ L	TR	L	TR	Ï	_	LT	R
Volume	32	1814 115		49 7	1181	8	180 j	15	10 59	•
Lane Wic	•		12.0 1		12.0	12.0	1		12.0 12	
RTOR Vol	L j	29	1	2	1		45		15	
Duration	1.00	Area		ll other al Operat		·				
Phase Co	ombination	n 1 2	3	4	.10118	5	б	7		
EB Left		A	Ŭ	NB	Left	A	Ü	,	8	
Thru	1	А		i	Thru	A				
Righ	nt	A		İ	Right					
Peds	5			İ	Peds					
WB Left		A		SB	Left		A			
Thru		A		1	Thru		A			
Righ		A		t	Right		A			
Peds				I	Peds					
NB Righ				EB	Right					
SB Righ	ıt	14.0 56.0		WB	Right					
Green Yellow		14.0 56.0				15.0	15.0			
All Red		4.0 4.0 1.0 1.0				4.0	4.0			
man nea		1.0 1.0				1.0	1.0		100.0	
		Interse	ction Pe	erformanc	e Summ	aru Cyci	.e Len	gtn: .	120.0	secs
Appr/	Lane	Adj Sat	Rati		Lane		Δnn	roach		·
Lane	Group	Flow Rate				croup	TTPP	LOGCII		
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Dela	y LOS		
Eastboun	d			**		·				
L	201	1719	0.18	0.12	48.2	Б				
TR	2288	4902	0.92	0.47	32.3	D C	32.6	С		
				0.17	52.5	C	J2.U	C		
Westboun										
L	207	1770	0.18		48.3	D				
TR	2298	4925	0.46	0.47	17.9	В	18.9	В		
Northbou	nd									
L	215	1719	0.93	0.13	120.3	F				
TR	194	1553	0.82	0.13	79.1	Ē	102.	1 F		
Southbou	nd									
Υm	226	1000								
LT R	226		0.12			D	47.6	D		
17	198	1583	0.25			D				
	THEFTSEC	tion Delay	- 35.6	(sec/vei	n) Ir	nterse	ction	LOS =	D	

Analyst: VRPA Technologies

Inter.: Magnolia/Mission Gorge

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: AM

Year : 2030

Project ID: Future No Project

E/W St: Mission Gorge

N/S St: Magnolia

								S St: 1						
				SI	GNALI	ZED I	NTERS	ECTION	SUMM	ARY				
			stbou	nd	We	stbou	nd		rthbo		1 50	uthbo	und	
		l L	T	R	L	T	R	L	T	R	L	T	R	
No. La	nes	'	2	1	. l	2		_			l			į
LGConf		L	T	R	L		0	1 2	2	1	1 2	2	1	_
Volume	_	92	307	126	412	TR		L	T	R	l L	${f T}$	R	
Lane W		12.0				1358	268	1633	961		613	1887	450	1
RTOR V		1	12.0	32	112.0	12.0	C 71	12.0	12.0		12.0	12.0	12.0	J
				J2	1		67	ĺ		149	!		113	
Durati	on	1.00	***	Area	Type:	All	other	areas			·	···		
Phase (Combi	natior	1 1	2	3)11aı (Opera	lons	5					
EB Le:	ft		A		ŭ	-	I NB	Left		6	7	1	3	
Th	ru			A			1 1/17	Thru	A	_				
Ric	ght			A			i			A				
Ped	ds						1	Right Peds		A				
WB Lei	ft		A				l SB	Left	71					
Thi	ru			A			ן טם		A	_				
Ric	ght			A			1	Thru		A				
Pec	is						1	Right		A				
NB Ric	ght						! EB	Peds						
SB Ric	ht						WB	Right Right						
	_							75 1 (11(1))						
			15.0	43.0			1 110	********		22.0				
Green			15.0 4.0	43.0 4.0			1 ***	********	15.0					
Green Yellow	i			4.0			1 40		15.0 4.0	4.0				
Green Yellow	i		4.0				(WD	112911C	15.0 4.0 1.0	4.0		100.0		
Green Yellow All Rec			4.0 1.0	4.0 1.0	tion	Perfo		-	15.0 4.0 1.0	4.0		120.0	se	C.S
Green Yellow All Rec	Lane	:	4.0 1.0 In Adj	4.0 1.0 tersec	tion Ra	Perfo tios		e Summ	15.0 4.0 1.0 Cyc.	4.0 1.0 le Len	gth:		se	Cs
Green Yellow All Rec Appr/ Lane	Lane Grou		4.0 1.0 In Adj Flow	4.0 1.0 tersed Sat Rate	Ra 	Perfo tios		-	15.0 4.0 1.0 Cyc.	4.0 1.0 le Len			se	Cs
Green Yellow All Rec Appr/ Lane	Lane Grou	:	4.0 1.0 In Adj Flow	4.0 1.0 tersec	tion Ra v/c	Perfo tios g/	rmanc	e Summ	15.0 4.0 1.0 Cyc ary_ Group	4.0 1.0 le Len	gth:		se	Cs
Green Yellow All Rec Appr/ Lane Grp Eastbou	Lane Grou Capa	p city	4.0 1.0 In Adj Flow	4.0 1.0 tersec Sat Rate s)	Ra 	tios 	rmanc	e Summ. Lane (15.0 4.0 1.0 Cyc ary_ Group	4.0 1.0 le Len	gth: roach		se	Cs
Green Yellow All Rec Appr/ Lane Grp Eastbou	Lane Grou Capa ind 417	p city	4.0 1.0 In Adj Flow (4.0 1.0 tersec Sat Rate s)	V/c 0.24	tios 	rmanc	e Summ. Lane (15.0 4.0 1.0 Cyc ary_ Group	4.0 1.0 le Len	gth: roach		se	C S
Green Yellow All Rec Appr/ Lane Grp Eastbou	Lane Grou Capa ind 417 123	p city	4.0 1.0 In Adj Flow (333 344	4.0 1.0 tersec Sat Rate s)	Ra V/c	tios g/	rmanc C	e Summ Lane (Delay	15.0 4.0 1.0 Cyc ary Group	4.0 1.0 le Len	gth: roach y LOS		se	Cs
Green Yellow All Rec Appr/ Lane Grp Eastbou L	Lane Grou Capa ind 417 123 567	p city	4.0 1.0 In Adj Flow (4.0 1.0 tersec Sat Rate s)	V/c 0.24	tios g/ 0.	ermanc C ———— 13 36	e Summa Lane o Delay	15.0 4.0 1.0 Cyc ary Group LOS	4.0 1.0 le Len	gth: roach		se	C S
Green Yellow All Rec Appr/ Lane Grp Eastbou L R Westbou	Lane Grou Capa and 417 123 567	p city 4	4.0 1.0 In Adj Flow (333 344 158	4.0 1.0 tersec Sat Rate s)	0.24 0.28 0.18	0. 0.	ermanc C ———— 13 36	e Summa Lane of Delay 47.7 25.8	15.0 4.0 1.0 Cyc ary_ Group LOS	4.0 1.0 le Len	gth: roach y LOS		se	CS
Green Yellow All Rec Appr/ Lane Grp Eastbou L R R Westbou	Lane Grou Capa and 417 123 567 and 430	p city 4	4.0 1.0 In Adj Flow (333 344 158	4.0 1.0 tersec Sat Rate s) 8 5	0.24 0.28 0.18	0. 0.	ermanc C ———— 13 36	e Summa Lane of Delay 47.7 25.8	15.0 4.0 1.0 Cyc ary Group LOS	4.0 1.0 le Len	gth: roach y LOS		se	CS
Green Yellow All Rec Appr/ Lane Grp Eastbou L T R Westbou L	Lane Grou Capa and 417 123 567	p city 4	4.0 1.0 In Adj Flow (333 344 158	4.0 1.0 tersec Sat Rate s) 8 5	0.24 0.28 0.18	0. 0.	rmanc C 13 36 36	e Summa Lane (Delay 47.7 25.8 26.6	15.0 4.0 1.0 Cyc. ary_ Group LOS D C	4.0 1.0 le Len	gth: roach y LOS C		se	CS
Green Yellow All Rec Appr/ Lane Grp Eastbou L T R Westbou L TR	Lane Grou Capa 117 123 567 1nd 430 121	p city 4	4.0 1.0 In Adj Flow (333 344 158	4.0 1.0 tersec Sat Rate s) 8 5	0.24 0.28 0.18	0. 0. 0.	rmanc C 13 36 36	e Summa Lane of Delay 47.7 25.8 26.6	15.0 4.0 1.0 Cyc. ary_ Group LOS D C C	4.0 1.0 le Lend App: Delay	gth: roach y LOS C		se	Cs
Green Yellow All Rec Appr/ Lane Grp Eastbou C R Westbou	Lane Grou Capa 117 123 567 1nd 430 121	p city 4	4.0 1.0 In Adj Flow (333 344 158: 343 337!	4.0 1.0 tersec Sat Rate s) 8 5 3	0.24 0.28 0.18 1.07 1.43	g/ 0. 0. 0.	13 36 36 13	e Summ. Lane (Delay 47.7 25.8 26.6 218.2 815.3	15.0 4.0 1.0 Cyc ary_ Group LOS D C C	4.0 1.0 le Lend App: Delay	gth: roach y LOS C		se	Cs
Green Yellow All Rec Appr/ Lane Grp Eastbou L R Westbou	Lane Grou Capa 117 123 567 10d 430 121	p city 4	4.0 1.0 In Adj Flow (333 344 158: 343 337:	4.0 1.0 tersec Sat Rate s) 8 5 3	0.24 0.28 0.18 1.07 1.43	0. 0. 0. 0.	2rmanc C 13 36 36 13 36	e Summ. Lane (Delay 47.7 25.8 26.6 218.2 815.3	15.0 4.0 1.0 Cyc ary Group LOS D C F F	4.0 1.0 le Lend App: Delay	gth: roach y LOS C		se	Cs
Green Yellow All Rec Appr/ Lane Grp Eastbou R R Westbou	Lane Grou Capa 117 123 567 1nd 430 121 und 417	p city 4	4.0 1.0 In Adj Flow (333 344 158 343 337 3344	4.0 1.0 tersec Sat Rate s) 8 5 3	0.24 0.28 0.18 1.07 1.43	0. 0. 0. 0.	2 mano C 13 36 36 13 36	e Summ. Lane Delay 47.7 25.8 26.6 218.2 815.3	15.0 4.0 1.0 Cyc ary Group LOS D C F F F	4.0 1.0 le Lend App: Delay	gth: roach y LOS C		se	C
Green Yellow All Rec Appr/ Lane Grp Eastbou E	Lane Grou Capa 117 123 567 1nd 430 121 und 417 775 346	p city 4	4.0 1.0 In Adj Flow (333 344 158: 343 337:	4.0 1.0 tersec Sat Rate s) 8 5 3	0.24 0.28 0.18 1.07 1.43	0. 0. 0. 0.	2 mano C 13 36 36 13 36	e Summ. Lane (Delay 47.7 25.8 26.6 218.2 815.3	15.0 4.0 1.0 Cyc ary Group LOS D C F F	4.0 1.0 le Lend App: Delay	gth: roach y LOS C		se	Cs
Green Yellow All Rec Appr/ Lane Grp Eastbou L R Nestbou IR Northbo	Lane Grou Capa 117 123 567 1nd 430 121 und 417 775 346	p city 4	4.0 1.0 In Adj Flow (333 344 158 343 337 337 338 344 1538	4.0 1.0 tersec Sat Rate s) 8 5 3	0.24 0.28 0.18 1.07 1.43 1.69 1.38 1.43	0. 0. 0. 0. 0.	13 36 36 13 36	e Summa Lane of Delay 47.7 25.8 26.6 218.2 815.3	15.0 4.0 1.0 Cyc. ary_ Group LOS D C F F F F F	4.0 1.0 le Lend App: Delay	gth: roach y LOS C		se	Cs
Green Yellow All Rec Appr/ Lane Grp Eastbou L T R Westbou	Lane Grou Capa 1123 567 110 430 121 und 417 775 346 und 430	p city 4	4.0 1.0 In Adj Flow (333 344 158: 343; 344; 1538	4.0 1.0 tersec Sat Rate s) 8 5 3	0.24 0.28 0.18 1.07 1.43 1.69 1.38 1.43	0. 0. 0. 0. 0. 0.	rmanc C 13 36 36 13 36 13 22 22	e Summ. Lane (Delay 47.7 25.8 26.6 218.2 815.3 1298 735.4 833.4	15.0 4.0 1.0 Cyc ary Group LOS D C F F F F F	4.0 1.0 le Lend App: Delay 30.0	gth: roach y LOS C		se	C s
Green Yellow All Rec Appr/ Lane Grp Eastbou L FR Westbou L FR Worthbo	Lane Grou Capa 1123 567 110 430 121 und 417 775 346 und	p city 4	4.0 1.0 In Adj Flow (333 344 158: 343; 354; 354; 354;	4.0 1.0 tersec Sat Rate s) 8 5 3 7	0.24 0.28 0.18 1.07 1.43 1.69 1.38 1.43 1.58 2.63	0. 0. 0. 0. 0. 0. 0. 0. 0.	rmanc C 13 36 36 13 22 22	e Summ. Lane (Delay 47.7 25.8 26.6 218.2 815.3 1298 735.4 833.4 1114 2980	15.0 4.0 1.0 Cyc ary Group LOS D C F F F F F F F	4.0 1.0 le Lend App: Delay	gth: roach y LOS C		se	C.S.
Green Yellow All Rec Appr/ Lane Grp Eastbou L F R Westbou L F R Vorthbo	Lane Grou Capa 117 123 567 110 430 417 775 346 und 430 798 356	p city 4	4.0 1.0 In Adj Flow (333 344 158 343 337 3344 1538 3445 1538	4.0 1.0 tersec Sat Rate s) 8 5 3 7	0.24 0.28 0.18 1.07 1.43 1.69 1.38 1.43 1.58 2.63 1.05	0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	Tmanc C 13 36 36 13 22 22	e Summ. Lane Delay 47.7 25.8 26.6 218.2 815.3 1298 735.4 833.4 1114 2980 199.9	15.0 4.0 1.0 Cyc ary Group LOS DCC FF FF FF FF FF	4.0 1.0 le Lend App: Delay 30.0	gth: roach y LOS C		se	C

Analyst: VRPA Technologies

Inter.: Magnolia/Mission Gorge

Area Type: All other areas Jurisd: San Diego County

Year : 2030

Period: PM

Date:

Agency: SDC

Project ID: Future No project

4/2/07

M/S St. Magnolia

E/W St	: Mission (Gorge		N/S	St: Ma	gnolia			
		S	IGNALIZED	INTERSE	CTION S	UMMARY			
	Eas	stbound	Westb	ound	Nort	hbound	Sou	thbound	-
	L	T R	L T	R	L	T R	l L	T R	1
No. Lar	nes 2	2 1	- i	2 0	i 2	2 1	-i	2 1	-i
LGConfi	•	T R	•	TR	L	T R	, L	T R	i
Volume	1143	734 321	363 97			676 626	616	1419 338	i
Lane Wi		12.0 12.0	12.0 12			2.0 12.0		12.0 12.0) i
RTOR V	·	80	1	51	1	157	i	85	ĺ
Duratio	on 1.00	Area	Type: Al			·····			
				l Operat	ions				~····
	Combination		3	4		5 6		8	
EB Lei		A		NB	Left	A P			
Thi		A		ļ	Thru	Į.			
	ght	A			Right	F	. A		
Ped	ds			l	Peds				
WB Let	ft	A		SB	Left	A			
Th	ru	A			Thru		A		
Ri	ght	A			Right		A		
Ped	ds			l	Peds				
NB Rig	ght			EB	Right				
SB Ric	ght			WB	Right				
Green		15.0 35.	0			15.0 8.	0 22.	0	
Yellow		4.0 4.0				4.0 4.	0 4.0)	
All Red	d	1.0 1.0				1.0 1.	0 1.0)	
				_	_	_	ength:	120.0	secs
T /	T		ection Pe						
Appr/	Lane	Adj Sat	Rati -	os	Lane G	roup F	pproach	1	
Lane	Group	Flow Rat		~ / C	Dollar	TOS DO	1 717 700	,	
Grp	Capacity	(s)	v/c	g/C	Delay	TOP DE	elay LOS)	
Eastbo									
L	417	3338	0.38	0.13	48.8	D	_		
\mathbf{T}	1005	3445	0.81	0.29	44.5		3.7 D		
R	462	1583	0.58	0.29	38.1	D			
Westbo									
L	430	3437		0.13	93.3	F			
TR	985	3376	1.27	0.29	538.5	F 43	80.1 F		
Northb	ound								
L	779	3338	1.14	0.23	319.8	F			
Т	1005	3445	1.85	0.29	1581	F 10)43 F		
R	449	1538	1.16	0.29	357.7	F			
Southb									
L	430	3437	1.59	0.13	1127	F			
$\overline{\mathtt{T}}$	650	3547	2.43	0.18		F 19	43 F		
R	290	1583		0.18	126.0				
-		ction Dela				tersecti	on LOS	= F	
	11166186		,,	(555) 76	,			-	

Agency: SDC Area Type: All other areas
Date: 4/2/07 Jurisd: San Diego County

Period: AM Year : 2030 Project ID: Future No Project AM Peak Hour Traffic

E/W St: Prospect Ave N/S St: Magnolia

STANDLTZED	INTERSECTION	VAKMMID

	Ea:	stbou	nd	We	stbou	nd	No:	rthbo	und	So	uthbo	und	Ī
	L	T	R	L	${f T}$	R	L	${f T}$	R	L	T	R	
	1			_1			_			_			_
No. Lanes	1 1	2	1	1	2	2	1 1	2	0	2	2	1,	
LGConfig	L	${f T}$	R	L	${f T}$	R	l L	TR		L	${f T}$	R	
Volume	47	192	52	112	683	1293	146	13	43	606	445	157	
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	
RTOR Vol			13			323			11			44	1
Duration	1.00		Area	Type:	All	other	areas						

Dur	ation	1.00		Area	Type:	All	ot.	her	areas					
					Si	gnal	q0	erat	ions					
Pha	se Combi	nation	1	2	3		4			5	6	7	8	
EB	Left		Α					NB	Left	A				
	Thru			A			1		Thru		A			
	Right			A			1		Right		A			
	Peds						į		Peds					
WB	Left		A				ı	SB	Left	A				
	Thru			A			- 1		Thru		A			
	Right			A					Right		Α			
	Peds						I		Peds					
NB	Right							EΒ	Right	A				
SB	Right		A				1	WB	Right	A				
Gre	en		15.0	35.0)					23.0	27.0			
Yel	low		4.0	4.0						4.0	4.0			
All	Red		1.0	1.0						1.0	1.0			

1.0 1.0 Cycle Length: 120.0 secs

						CACT	e Leng	th: 1	20.0	secs
		Intersed	ction Pe	rforman	ce Summa	ry				
Appr/	Lane	Adj Sat	Rati	os	Lane G	roup	Appr	oach		
Lane	Group	Flow Rate							_	
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
 Eastbou	und	- Laminaria								
L	215	1719	0.24	0.13	47.9	D				
T	1005	3445	0.21	0.29	31.9	С	32.1	С		
R	831	1583	0.05	0.52	13.9	В				
Westbou	ınd									
L	221	1770	0.55	0.13	52.4	D				
T	1005	3445	0.74	0.29	41.0	D	32.5	С		
R	1429	2722	0.74	0.52	24.2	С				
Northbo	ound									
L	329	1719	0.15	0.19	40.6	D				
TR	692	3076	0.07	0.22	36.7	D	38.7	D		
Southbo	ound									
L	659	3437	1.00	0.19	118.6	F				
Т	798	3547	0.61	0.22	43.1	D	80.6	F		
R	620	1583	0.20	0.39	24.2	С				
	Intersec	tion Delay	= 49.6	(sec/v	eh) In	terse	ction	Los =	D	

Analyst: VRPA Technologies

Inter.: Magnolia/Prospect Ave
Area Type: All other areas

Agency: SDC Date: 4/2/07

Jurisd: San Diego County

Period: PM Year : 2030 Project ID: Future No Project PM Peak Hour Traffic

E/W St: Prospect Ave

N/S St: Magnolia

			SIG	SNALIZ	ZED I	NTERSE	ECTION	SUMMA	ARY				
******	Eas	stbound		Wes	stbou	ınd	Nor	thbou	ınd	Sou	ithboi	und	1
	L	T F	}	L	${f T}$	R	L	T	R	L	T	R	1
No. Lar	nes	2 1	l	1	2	2	-	2	¦.	2	2	1	¦
LGConfi	•	T	R	L	T	R	' L	TR		L _	T	R	i
Volume	74	555 41		153	556	1393		481	161	1077	335	82	i
	idth 12.0						12.0				12.0		ì
RTOR Vo		10				348	1		40 [12.0	20	, i
	, 												
Duratio	on 1.00	Ar	rea T			other Operat							
Phase (Combination	n 1	2	3		l		5	6	7		 В	
EB Lei	£t	A				NB	Left	A	A				
Thi	ru		A			1	Thru		A	A			
Ric	ght		A			1	Right		A	Α			
Ped						1	Peds						
WB Lei	Et	A				SB	Left	Α					
Thi	cu		A			İ	Thru			A			
Rig	ght		A			İ	Right			A			
Ped						i	Peds						
NB Rig	aht					EB	Right	A					
SB Rig	-	A				i WB	Right						
Green	•		24.0			•	,	32.0	6.0	16.	. 0		
Yellow			1.0					4.0	4.0	4.0)		
All Red	f		.0					1.0	1.0	1.0			
								Сус	le Len			0 s	secs
							ce Summ	ary					
Appr/	Lane	Adj S	Sat	Ra	atios	3	Lane	Group	App	roach	1		
Lane	Group	Flow F	Rate										
Grp	Capacity	(s)		v/c	Ğ	J/C	Delay	LOS	Dela	у гоз	3		
Eastbo	ınd												
L	244	1719		0.33	3 ().14	47.1	D					
T	689	3445		0.88	3 (0.20	60.4	E	45.6	D			
R	805	1583		0.42	2 ().51	18.8	В					
Westbou	und												
L	251	1770		0.66	5 (0.14	55.3	E					
T	689	3445		0.88	3 (0.20	60.7	E	41.4	D			
R	1384	2722		0.82	2 ().51	29.1	С					
Northbo	ound												
L	616	1719		0.17	7 (36	26.4	С					
TR	752	3341		0.87	7 (0.22	57.1	E	52.9	D			
Southbo	ound												
L	917	3437		1.28	3 (0.27	551.5	F					
T	473	3547		0.7		0.13	58.2	E	417.	6 F			
R	501	1583		0.13		3.32	29.4	c	_ · •	_			
-	-		_		`			_	_				

Intersection Delay = 157.9 (sec/veh) Intersection LOS = F

Analyst: VRPA Technologies

Inter.: Magnolia /Riverview Pkwy

Area Type: All other areas Jurisd: San Diego County

Date: 4/2/07 Period: AM

Agency: SDC

Year : 2030

Project ID: Future No Project

E/W St: Riverview Pkwy

N/S St: Magnolia

E/W St:	Riverview	PKWY		N/S	St: Ma	agnoli	La			
				INTERSE						
	•	tbound	Westh		· · ·	thbour	· ·		hbound	•
	l L	T R	L I	R	L	${f T}$	R	L	T F	·
No. Lan	es	0 1	0	0 0	-¦	3	- ¦	0	3 1	¦
LGConfi	•	R	-		L	T	i	_	T	R
Volume	 336	160			•	1081	į	1	261 49	
Lane Wi		12.0			12.0	12.0	į		2.0 12	
RTOR Vo	· · · · · · · · · · · · · · · · · · ·	33			1		Ì		10	
Duratio	n 1.00	Area T		l other						
Dhaga C	ombination	1 2	Signa 3	al Operat 4	lons	5	6	7		
		1 1 2 A	J	I NB	Left	A	b	,	O	
EB Lef Thr		P.		1 10 0	Thru	A	A			
Rig	=	A		1	Right	A	A			
Ped		A		1	Peds					
WB Lef				l SB	Left					
wb Lei Thr				1 20	Thru		А			
Rig				ļ Ī	Right		A			
Ped				ļ I	Peds		A			
NB Rig				 EB	Right					
SB Rig				WB	Right					
Green	116	45.0		I MD	Kraire	22.0	38.0			
Yellow		4.0				4.0	4.0			
All Red		1.0				1.0	1.0			
ALL NCG	•	1.0						gth: 1	20 0	secs
		Intersec	tion Pe	erformano	e Summa	_		9		
Appr/	Lane	Adj Sat	Rati		Lane (aaA	roach		
Lane	Group	Flow Rate								
Grp	Capacity	(s)	V/C	g/C	Delay	LOS	Dela	y LOS	_	
Eastbou	nd									
L	645	1719	0.58	0.38	31.2	С				
_	·	4500		0 00	0.5.0	~	29.8	С		
R	594	1583	0.24	0.38	25.9	С				
Westbou	ına									
Northbo										
L	315	1719	0.58	0.18	47.4	D				
Т	2670	4929	0.45	0.54	11.7	В	16.4	В		
Southbo	und									
Т	1607	5074	0.87	0.32	43.6	D	46.6	D		
R	501	1583		0.32		E	7 U . U	ט		
t.		ction Delay					ection	LOS =	C	
	THICTDE	reton beray	- JJ.I	(300) VC	1/ L:			TOD		

Analyst: VRPA Technologies

Inter.: Magnolia /Riverview Pkwy

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: PM

Year : 2030

Project ID: Future No Project

E/W St: Riverview Pkwy

N/S St: Magnolia

		SI	GNALIZE	INTERSE	CTION S	SUMMAR	RYY				
	Eas	tbound	Westb	ound	Nort	hbour	ıd	Sou	thbou	nd	
	L 	T R	L T	R	L 	T	R	L	Т	R	
No. Lanes	s ———	0 1	i	0 0	' 1	3	i	0	3	1	,
LGConfig	L	R	ì		L	${f T}$	i		Т	R	
Volume	553	182	İ		199 1	.401	i		1201	373	I
Lane Widt		12.0	İ		12.0 1	2.0	i		12.0]
RTOR Vol	İ	45	ĺ		İ		į			93	
Duration	1.00	Area		l other I Operat							
Phase Con	nbination	1 2	3	4		5	6	7	8		
EB Left		A		l NB	Left	A					
Thru				1	Thru	Α	A				
Right	Ė	A		1	Right						
Peds				I	Peds						
WB Left				SB	Left						
Thru					Thru		A				
Right	Ī.			I	Right		А				
Peds				l	Peds						
NB Right				[EB	Right						
SB Right	Ė			WB	Right						
Green		45.0				22.0	38.0				
Yellow		4.0				4.0	4.0				
All Red		1.0				1.0	1.0				
		Tatorco	ation Do	erformanc	o Cumma		e Len	gtn:	120.0	sed	CS
Appr/ I	Lane	Incerse Adj Sat	Rati		Lane G		App	roach			
* *	Group	Flow Rate		.00		JIOUP	**55	10401			
	Capacity	(s)	v/c	g/C	Delay	LOS	Dela	y LOS			
•		, ,		_							
Eastbound	£							4			
L						······································	-				
4.3	645	1719	0.95	0.38	72.5	E					
						E	63.3				
R	594	1719 1583	0.95	0.38	72.5	······································	63.3				
	594					E	63.3				
R	594					E	63.3				
R	594					E	63.3				
R Westbound	594 1					E	63.3				
R Westbound	594 d	1583	0.26	0.38	26.2	E C	63.3				
R Westbound Northbour L	594 d nd 315	1583 1719	0.26	0.38	26.2	E C		E			
R Westbound	594 d	1583	0.26	0.38	26.2	E C	63.3	E			
R Westbound Northbour	594 d ad 315 2670	1583 1719	0.26	0.38	26.2	E C		E			
R Westbound Northbour L T	594 d ad 315 2670	1583 1719 4929	0.26 0.70 0.58	0.38 0.18 0.54	26.2 53.0 13.2	E C D B	18.1	Е			
R Westbound Northbour L T Southbour	594 d ad 315 2670 ad	1583 1719 4929 5074	0.26 0.70 0.58	0.38 0.18 0.54	26.2 53.0 13.2	E C D B		Е			
R Westbound Northbour L T	594 d ad 315 2670 ad 1607 501	1583 1719 4929	0.26 0.70 0.58 0.83 0.62	0.38 0.18 0.54	26.2 53.0 13.2 40.9 37.3	E C D B	18.1	E B			

Analyst: VRPA Technologies

Agency: SDC Date: 4/2/07

Period: AM

Project ID: Future w Project

E/W St: Town Center

Inter.: Cuyamaca/Town Center Area Type: All other areas Jurisd: San Diego County

Year : 2030

N/S St: Cuvamaca

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B Right		A				WB	Right	A					
reen		15.0	11.0	25.0)			16.0	27.	0			
rellow		4.0	4.0	4.0				4.0	4.0				
all Red		1.0	1.0	1.0				1.0	1.0				

Appr/ Lane Adj Sat Ratios Lane Group Approach Group Flow Rate Lane

Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	_
Eastb	ouna								
L	433	3437	0.43	0.13	48.3	D			
T	745	3547	0.55	0.21	42.3	D	41.5	D	
R	612	1583	0.13	0.39	21.4	С			
Westbo	ound								
L	895	3437	0.29	0.26	35.2	D			
T	1222	3547	0.62	0.34	31.2	С	28.4	С	
R	825	1583	0.28	0.52	11.8	В			
North	bound								
L	462	3437	0.20	0.13	45.9	D			
T	1151	5074	0.45	0.23	39.7	D	36.0	D	
R	838	1583	0.13	0.53	10.2	В			
South	oound								
L	462	3437	0.88	0.13	57.5	E			
\mathbf{T}	1151	5074	0.68	0.23	42.6	D	43.3	D	
R	625	1583	0.43	0.39	23.7	С			
	Intersec	tion Dela	v = 37.2	Isec/v	rehl Ti	ntare	action	TOS -	n

Intersection Delay = 37.2 (sec/veh) Intersection LOS = D

Analyst: VRPA Technologies

Agency: SDC

Inter.: Cuyamaca/Town Center
Area Type: All other areas
Jurisd: San Diego County

Date: 4/2/07 Period: PM

Year : 2030

Project ID: Future w project

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	Defining L T Filter Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane Lane		SI	GNALIZE	D INTE	RSECT	TON	SUMMA	RY				
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RTOR Vol	Ì			i İ	89	İ			63			90	i
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NB Right		A			ĺ.		ight	A					
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Green		12.0	19.0	20.0				15.0	29.0)			
Yellow		4.0	4.0	4.0				4.0	4.0				
All Red		1.0	1.0	1.0				1.0	1.0				
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Appr/ Lan					ios			Group		roach			
						-					•		
				v/c	g/C	De	elay	LOS	Dela	y LOS	3		
Eastbound													
				0.14	0.30		0.7	С					
	01	354	17	0.07	0.37	23	3.0	С	18.6	5 B			
מ סו								•					
	4	158	33	0.36	0.53		1.6	В					
Westbound						11	1.6	В					
Westbound L 34	4	343	37	0.44	0.10	11 51	1.6	B D					
Westbound L 34 T 59	4 1	343 354	37 17	0.44	0.10 0.17	13 51 43	1.6 1.2 3.1	B D D	39.4	l D			
Westbound L 34 T 59 R 52	4 1	343 354	37 17	0.44	0.10	13 51 43	1.6	B D		i D			
Westbound L 34 T 59 R 52 Northbound	4 1 8	343 354 158	37 17 33	0.44 0.19 0.55	0.10 0.17 0.33	11 51 43 31	1.6 1.2 3.1 1.7	B D D C		l D			
Westbound L 34 T 59 R 52 Northbound L 43	4 1 8	343 354 158	37 17 33	0.44 0.19 0.55	0.10 0.17 0.33	11 51 43 31	1.6 1.2 3.1 1.7	B D D C	39.4				
Westbound L 34 T 59 R 52 Northbound L 43 T 12	4 1 8 0 26	343 354 158 343 507	37 17 33 37	0.44 0.19 0.55 0.72 0.79	0.10 0.17 0.33 0.13 0.24	11 51 43 31 52 43	1.6 1.2 3.1 1.7 2.4 3.8	B D D C					
Westbound L 34 T 59 R 52 Northbound L 43 T 12 R 60	4 1 8 0 26	343 354 158 343 507	37 17 33 37	0.44 0.19 0.55	0.10 0.17 0.33	11 51 43 31 52 43	1.6 1.2 3.1 1.7	B D D C	39.4				
Westbound L 34 T 59 R 52 Northbound L 43 T 12 R 60 Southbound	4 1 8 0 26	343 354 158 343 507 158	37 17 33 37 74	0.44 0.19 0.55 0.72 0.79 0.33	0.10 0.17 0.33 0.13 0.24 0.38	15 43 31 52 43 24	1.6 1.2 3.1 1.7 2.4 3.8 4.0	B D C D D	39.4				
Westbound L 34 T 59 R 52 Northbound L 43 T 12 R 60 Southbound L 43	4 1 8 0 26 7	343 354 158 343 507 158	37 47 33 37 74 33	0.44 0.19 0.55 0.72 0.79 0.33	0.10 0.17 0.33 0.13 0.24 0.38	15 45 31 54 43 24	1.6 1.2 3.1 1.7 2.4 3.8 4.0	B D C D D C	39.4 42.9) D			
Westbound L 34 T 59 R 52 Northbound L 43 T 12 R 60 Southbound L 43	4 1 8 0 26 7 0 26	343 354 158 343 507 158	37 47 33 37 74 33	0.44 0.19 0.55 0.72 0.79 0.33	0.10 0.17 0.33 0.13 0.24 0.38	15 45 31 52 43 43 43 44 44 44	1.6 1.2 3.1 1.7 2.4 3.8 4.0	B D C D D	39.4) D			

Analyst: VRPA Technologies

Agency: SDC

Inter.: Cuyamaca/Mission Gorge

Area Type: All other areas Jurisd: San Diego County Date: 4/2/07

Year : 2030

Period: AM Project ID: Future w Project

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	112.0 12.0		12.0	12.0		112.0	12.0		12.0	12.0		- 1
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Yellow	4.0	4.0					4.0	4.0	4.0)		
All Red	1.0	1.0					1.0	1.0	1.0	1		
	7	Intersec	rtion	Dorfo	rmanc	e Siimm		le Len	gth:	120.0)	secs
Appr/ Lan				tios	Timanc		Group	App	roach	·····		
Lane Gro	up Flo	ow Rate										
Grp Cap	acity	(s)	v/c	g/	C	Delay	/ LOS	Dela	y Los	1		
Eastbound			-									· · · · · · · · · · · · · · · · · · ·
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TR 84					25	37.3		39.6	D			
Southbound												
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					14		F	85.3	F			
In	tersection	n Delay	= 44.	3 (s	ec/ve	h) I	nters	ection	LOS	= D		

Analyst: VRPA Technologies

Inter.: Cuyamaca/Mission Gorge

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: PM

Year : 2030

Project ID: Future w Project

	STOIL G	orge				IV	/5	St: C	uyama	ıca				
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	Eastbound			Wes	stbou	nd	I	Nor	thbou	ınd	Sot	ıthbo	und	T
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No. Lanes	j	3	1	<u>j</u> 2	3	1	; i	2	2	0	2	3	0	'
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Green			30.0			•		_	A 25.0)			
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Green Yellow		4.0	4.0 1.0		Perf	W	В	Right	A 25.0 4.0 1.0 Cyc	4.0		120.	0 :	sec.
Green Yellow All Red	e	4.0 1.0	4.0 1.0 nterse	ction	Perf atios	W	В	Right	A 25.0 4.0 1.0 Cyc	4.0 1.0 :le Le			0 :	sec.
Green Yellow All Red Appr/ Lan		4.0 1.0 In	4.0 1.0 nterse j Sat	ction Ra		W	В	Right Summ	A 25.0 4.0 1.0 Cyc	4.0 1.0 :le Le	ngth:		0 :	sec.
Green Yellow All Red Appr/ Lan Lane Gro	up	4.0 1.0 In Adj	4.0 1.0 nterse Sat Rate	ction Ra	tios	W	В	Right Summ	A 25.0 4.0 1.0 Cyc ary_ Group	4.0 1.0 :le Le	ngth:	1	0 :	sec.
Green Yellow All Red Appr/ Lan Lane Gro Grp Cap	up acity	4.0 1.0 Ir Adj Flow	4.0 1.0 nterse j Sat v Rate (s)	ction Ra v/c	atios g	W	В	Right Summ Lane Delay	A 25.0 4.0 1.0 Cyc ary_ Group	4.0 1.0 :le Le	ngth: proach	1	0 :	sec.
Green Yellow All Red Appr/ Lan Lane Gro Grp Cap Eastbound L 61	up acity 2	4.0 1.0 Ir Adj Flow	4.0 1.0 nterse j Sat v Rate (s)	ction Ra v/c 0.93	atios g	orma: //C	В	Summ Lane Delay	A 25.0 4.0 1.0 Cyc ary Group	4.0 1.0 :le Lei Dela	ngth: proach	1	0 :	sec.
Green Yellow All Red Appr/ Lan Lane Gro Grp Cap Eastbound L 61 T 12	up acity 2 32	4.0 1.0 Ir Adj Flow (4.0 1.0 nterse j Sat v Rate (s)	ction Ra v/c 0.93	g g 3 0	orma: //C .18	В	Summ Lane Delay 76.6 883.8	A 25.0 4.0 1.0 Cyc ary Group	4.0 1.0 :le Le	ngth: proach	1	. 00	sec
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Green Yellow All Red Appr/ Lan Lane Gro Grp Cap Eastbound L 61 T 12 R 79 Westbound L 63 T 12 R 76	up acity 2 32 2 0 32	4.0 1.0 In Adj Flow (333 492 158 343 492	4.0 1.0 nterse j Sat w Rate (s) 38 29 33	0.93 0.34 0.44	g g g g g g g g g g g g g g g g g g g	orma: 7C .18 .25 .50	В	e Summ Lane Delay 76.6 883.8 18.4	A 25.0 4.0 1.0 Cyc ary Group LOS E F B	4.0 1.0 :le Le: Del:	oroach	1	0 :	sec
Green Yellow All Red Appr/ Lan Lane Gro Grp Cap Eastbound L 61 T 12 R 79 Westbound L 63 T 12 R 76 Northbound	up acity 2 32 2 0 32 9	4.0 1.0 In Adj Flow (333 492 158 349 153	4.0 1.0 nterse j Sat v Rate (s) 38 29 33	0.93 0.34 0.44 0.92 0.19	g 3 0 5 0 4 0	orma: //C .18 .25 .50 .18	В	76.6 883.8 18.4 44.1 57.8 16.7	A 25.0 4.0 1.0 Cyc ary Group LOS E F B D E B	4.0 1.0 :le Le: Del:	oroach	1	0 :	sec
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Intersection Delay = 398.7 (sec/veh) Intersection LOS = F

Analyst: VRPA Technologies In

Inter.: Cottonwood/Mission Gorge

Agency: SDC Date: 4/2/07 Area Type: All other areas Jurisd: San Diego County

Period: AM

Year : 2030

Project ID: Future with project

E/W St: Mission Gorge N/S St: Cottonwood

E/W St:	: Mission (Gorge		N/S	S St: C	ottonw	ood				
	L D. Lanes 1 GConfig L Dolume 37 Ene Width 12.0 FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR Vol FOR FOR FOR FOR FOR FOR FOR FOR FOR FOR		GNALIZED								•
		stbound T R	Westb		L	thboun T	a : R :	Sot L	ıthboı T	ına R	1
	1	*	1	**					-	**	*
	•	3 0	1	3 0	1		0 [0	1	1	-
	_	TR	•	TR	L	TR	10	2 17	LT	R	
	•	496 34 12 0	53 85 12.0 12		132 12.0		40	17	6 12 0	52 12.0	1
	•	9		5	112.0		5		12.0	13	
Duratio	on 1.00	Area	Type: Al								
Bhase (Combination	n 1 2	Signa 3	1 Operat 4 I	cions	5		7		 3	
		11 1 2 A	J	I NB	Left	A	O	,	(ט	
		A			Thru	A					
Rig	ght	A	•	1	Right	A					
				1	Peds						
		A		SB	Left		A				
		A A		1	Thru Right		A A				
		A		1	Peds		A				
				EB	Right						
	_			WB	Right						
Green		16.0 50.0)			24.0	10.0				
Yellow		4.0 4.0				4.0	4.0				
All Red	d	1.0 1.0				1.0	1.0	1- 1-	100 /		
		Interse	ection Pe	rformano	re Summ.	-	e Len	gtn:	120.0	J Se	ecs
Appr/	Lane	Adj Sat	Rati			Group	App	roach	1		
Lane	Group	Flow Rate									
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Dela	y Los	;		
L		1719	0.18 0.28	0.13 0.42	46.5	D C	22.1	c			
TR	2042	4900	0.20	0.42	20.4	C	22.1	С			
L		1770		0.13	47.2	D	00.5	_			
TR	2049	4918	0.47	0.42	22.4	С	23.9	С			
		_	_		_						
L		1719	0.43	0.20	42.8	D	46 -				
TR	314	1571	0.42	0.20	42.9	D	42.9	D			
Southbo	ound										
LT	150	1797	0.17	0.08	51.7	D	52.7	D			
R	132	1583		0.08	53.3	D		=			
	Interse	ction Delay	y = 27.0	(sec/ve	eh) I	nterse	ction	LOS	= C		

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Jurisd: San Diego County Year : 2030

Period: PM

Project ID: Future with Project

E/W St: Mission Gorge N/S St: Cottonwood

		SI	GNALIZED	INTERSE	CTION S	SUMMAR	Y		
	Eas	stbound	Westb	ound	Nort	thboun	d	Southbo	und
	L 	T R	L T	R	<u>L</u> 	T	R	L T	R
No. Lane	s 1	3 0	i 1	3 0	<u> </u>	1	0 i	0 1	1 i
LGConfig	L	TR	L	TR	L	TR	į	LT	•
Volume	41	1814 115	34 94	9 7	1181 8	3 1	80 [21 10	67
Lane Wid	th [12.0	12.0	12.0 12	.0	112.0 1	12.0	1	12.0	12.0
RTOR Vol	1	29	1	2	1	4	5		17
Duration	1.00	Area '		l other					
				1 Operat	ions				
	mbination		3	4		5	6	7	8
EB Left		A		NB	Left	A			
Thru		A		l N	Thru	A			
Righ		A		l Y	Right	A			
Peds		_			Peds				
WB Left		A		SB	Left		A		
Thru		A		ļ.	Thru		A		
Righ		A		!	Right		A		
Peds					Peds				
NB Righ				EB	Right				
SB Righ	.t	14 0 50 0		WB	Right	00 0	100		
Green		14.0 52.0				22.0	12.0		
Yellow		4.0 4.0				4.0	4.0		
All Red		1.0 1.0				1.0	1.0 e Ten	gth: 120.	0 secs
		Interse	ction Pe	rformanc	e Summa		CC.	9011. 120.	0 5005
Appr/	Lane	Adj Sat	Rati		Lane (qqA	roach	
	Group	Flow Rate				•	* +		
	Capacity	(s)	v/c	g/C	Delay	LOS	Dela	y LOS	
Eastboun	d	······································	WAS TRUE HAVE WITH THE MEAN AND		. u u				
L	201	1719	0.23	0.12	48.7	D			
TR	2124	4902	0.99	0.43	63.0	E	62.7	E	
Westboun	.d								
L	207	1770		0.12					
TR	2134	4925	0.50	0.43	21.2	С	22.2	С	
Northbou									
L	315	1719		0.18		D			
TR	285	1553	0.56	0.18	47.0	D	48.5	D	
Southbou	nd								
LT	180	1802	0 19	0.10	50.0	D	51.1	D	
R	158	1583		0.10			○ T • T	U	
11		ction Delay					ction	Los = D	
	zi, cornec	cron beray	10.0	1200/00	, 11		~ ~ ~ ~ ~ 11	. <u> </u>	

Analyst: VRPA Technologies

Inter.: Magnolia/Mission Gorge

Agency: SDC Date: 4/2/07

Area Type: All other areas Jurisd: San Diego County

Period: AM

Year : 2030

Project ID: Future w Project

E/W St: Mission Gorge

N/S St: Magnolia

			SI	IGNALI	ZED I	NTERS	ECTION	SUMM	ARY				
	Eas	stbou	nd	We	stbou	nd	l No:	rthbo	und	Soi	ıthboı	und	
	L	T	R	L	${f T}$	R	L	\mathbf{T}	R	L	${f T}$	R	
	1						I			_1			_ I
No. Lanes	2	2	1	2	2	0	2	2	1	2	2	1	_
LGConfig	L	${f T}$	R	L	TR		L	\mathbf{T}	R	L	${f T}$	R	
Volume	92	310	127	412	1362	272	635	972	594	616	1896	450	
Lane Width	12.0	12.0	12.0	112.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	1
RTOR Vol			32	1		68			149			113	

Dur	ation	1.00		Area '	Type:	All	ot	her	areas					
					Si	gnal	. Op	erat	ions					
Pha	se Combi	ination	1	2	3	_	4			5	6	7	8	W
EΒ	Left		A					NB	Left	A				
	Thru			A			- 1		Thru		A			
	Right			A			1		Right		A			
	Peds						1		Peds					
WB	Left		A				1	SB	Left	A				
	Thru			A			Ţ		Thru		A			
	Right			A			Ī		Right		A			
	Peds						1		Peds					
NB	Right						1	EВ	Right					
SB	Right						1	WB	Right					
Gre	-		15.0	43.0					_	15.0	27.0			
Yel	low		4.0	4.0						4.0	4.0			
A11	Red		1.0	1.0						1.0	1.0			

Cycle Length: 120.0 secs

		Intersec	tion Pe	rformanc	e Summa:	ry			
Appr/	Lane	Adj Sat	Rati	os	Lane G	roup	Appro	ach	
Lane	Group	Flow Rate							
Grp	Capacity	(s)	v/c	g/C	Delay :	LOS	Delay	LOS	
Eastbou									
L	417	3338	0.24	0.13	47.7	D			
T	1234	3445	0.28	0.36	25.8	С	30.0	С	
R	567	1583	0.19	0.36	26.6	С			
Westbou	nd								
L	430	3437	1.07	0.13	218.2	F			
TR	1210	3378	1.44	0.36	829.3	F	702.0	F	
Northbo	und								
Ŀ	417	3338	1.69	0.13	1310	F			
${f T}$	775	3445	1.39	0.22	763.0	F	947.8	F	
R	346	1538	1.43	0.22	833.4	F			
Southbo	und								
L	430	3437	1.59	0.13	1127	F			
${f T}$	798	3547	2.64	0.22	3003	F	2266	F	
R	356	1583	1.05	0.22	199.9	F			
	Intersec	tion Delay	= 1329	(sec/ve	h) In	terse	ction I	os = F	

Agency: SDC Area Type: All other areas
Date: 4/2/07 Jurisd: San Diego County

Period: PM Year : 2030

Project ID: Future w Project

All Red 1.0 1.0

E/W St: Mission Gorge N/S St: Magnolia

			S	IGNALI	ZED I	NTERSI	ECTION	SUMM	ARY				
	Eas	stbou	nd	We:	stbou	ınd	[No:	rthbo	und	So	ıthboı	und	Ī
	L	${f T}$	R	L	T	R	L	${f T}$	R	L	${f T}$	R	-
	1			_			_			_			
No. Lanes	2	2	1	2	2	0	2	2	1	2	2	1	-
LGConfig	L	${f T}$	R	L	ΤF	l.	L	${f T}$	R	L	${f T}$	R	
Volume	143	738	323	363	980	208	1803	1690	626	620	1431	338	-
Lane Width	[12.0	12.0	12.0	12.0	12.0	}	112.0	12.0	12.0	12.0	12.0	12.0	
RTOR Vol	*		81	1		52			157	1		85	
Duration	1.00		Area	Type:	All	other	areas					······································	********
				Si	gnal	Operat	tions_						
Phase Comb	inatio	n 1	2	3	4			5	6	7	1	8	
EB Left		A				NB	Left	A	A				
Thru			A			l	Thru		A	A			
Right			A			1	Right	<u> </u>	A	A			
Peds						1	Peds						

Ph	ase Combination	1	2	3	4				5	6	7	8
ΕĐ	Left	A					NB	Left	A	A		
	Thru		A			1		Thru		A	A	
	Right		A					Right		Α	A	
	Peds							Peds				
WB	Left	A				ŀ	SB	Left	A			
	Thru		A			1		Thru			A	
	Right		A			ı		Right			A	
	Peds					1		Peds				
NΒ	Right					ı	EΒ	Right				
SE	Right					1	WB	Right				
Gr	een :	15.0	35.0						15.0	8.0	22.0	
Ye	llow	4.0	4.0						4.0	4.0	4.0	

1.0 1.0 1.0 Cycle Length: 120.0 secs

						Cycl	e Lengt	:h: 1	20.0	secs
		Intersec	ction Pe	rformand	e Summa	ry				
Appr/	Lane	Adj Sat	Rati	os	Lane G	roup	Appro	oach		
Lane	Group	Flow Rate								
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	_	
Eastbou	ınd									
L	417	3338	0.38	0.13	48.8	D				
${f T}$	1005	3445	0.82	0.29	44.8	D	43.9	D		
R	462	1583	0.58	0.29	38.1	D				
Westbou	ınd									
L	430	3437	0.94	0.13	93.3	F				
TR	984	3374	1.28	0.29	558.9	F	446.2	F		
Northbo	ound									
L	779	3338	1.15	0.23	324.2	F'				
${f T}$	1005	3445	1.87	0.29	1610	F	1063	F		
R	449	1538	1.16	0.29	357.7	F				
Southbo	ound									
L	430	3437	1.60	0.13	1148	F'				
T	650	3547	2.45	0.18	2657	F	1973	F		
R	290	1583	0.97	0.18	126.0	F				
	Intersec	tion Delay	= 1066	(sec/ve	eh) In	terse	ction 1	LOS =	F	

Analyst: VRPA Technologies Inter.: Magnolia/Prospect Ave

Agency: SDC Area Type: All other areas
Date: 4/2/07 Jurisd: San Diego County

Period: AM Year : 2030
Project ID: Future with Project AM Peak Hour Traffic
E/W St: Prospect Ave N/S St: Magnolia

STONALIZED	INTERSECTION	SHMMARY
O T GNUTT UDD	T11 T T T T T C T T C I I	OOMINGILI

				. C.1111111	100 I	., 1 11.01	1011011	0011111					
	Eas	stbou	nd	Wes	stbou	nd	No:	rthbo	und	Sc	uthbo	und	Ī
	L	T	R	L	${f T}$	R	<u>L</u>	T	R	L	T	R	
	1			1			_1			1			_ [
No. Lanes	1	2	1	1	2	2	1	2	0	2	2	1	_
LGConfig	l L	${f T}$	R	L	${f T}$	R	L	TR		L	${f T}$	R	-
Volume	47	192	52	112	683	1306	46	13	43	606	445	157	-
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	1
RTOR Vol			13	1		326	1		10	1		39	1

Dur	ation	1.00		Area	Type:	All	ot	her	areas					
					Si	gnal	Οp	erat	ions					
Pha	se Combi	ination	1	2	3		4			5	6	7	8	
EB	Left		A				1	NB	Left	A				
	Thru			A			1		Thru		A			
	Right			A			1		Right		A			
	Peds						ļ		Peds					
WB	Left		A				t	SB	Left	A				
	Thru			A			1		Thru		A			
	Right			A			t		Right		A			
	Peds						1		Peds					
NB	Right						1	EB	Right	A				
SB	Right		Α				1	WB	Right	A				
Gre	en		15.0	37.0	ı					23.0	25.0			
Yel	low		4.0	4.0						4.0	4.0			
All	Red		1.0	1.0						1.0	1.0			

Cycle Length: 120.0 secs

				_		-	e rend	CII: I	20.0	secs	,
		Intersec	tion Pe	rformanc	e Summa	ry					
Appr/	Lane	Adj Sat	Rati	os	Lane G	roup	Appr	oach			
Lane	Group	Flow Rate									
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	_		
Eastbou	ınd			 							
L	215	1719	0.24	0.13	47.9	D					
${f T}$	1062	3445	0.20	0.31	30.0	С	30.7	С			
R	857	1583	0.05	0.54	13.0	В					
Westbou	ınd										
L	221	1770	0.55	0.13	52.4	D					
${f T}$	1062	3445	0.70	0.31	37.9	D	30.3	С			
R	1474	2722	0.72	0.54	22.5	С					
Northbo	und										
L	329	1719	0.15	0.19	40.6	D					
TR	640	3073	0.08	0.21	38.3	D	39.4	D			
Southbo	und										
L	659	3437	1.00	0.19	118.6	F					
T	739	3547	0.65	0.21	45.7	D	81.5	F			
R	594	1583	0.22	0.38	25.7	С					
	Intersec	tion Delay	= 48.7	(sec/ve	h) In	terse	ction	LOS =	D		

Analyst: VRPA Technologies Inter.: Magnolia/Prospect Ave Agency: SDC Area Type: All other areas

Date: 4/2/07 Jurisd: San Diego County

Period: PM Year : 2030
Project ID: Future With Project PM Peak Hour Traffic
E/W St: Prospect Ave N/S St: Magnolia

			S	IGNALI	ZED I	NTERSI	ECTION	SUMM	ARY				
	Ea	stbou	nd	We	stbou	nd	No	rthbo	und	So	uthbo	und	
	l L	${f T}$	R	L	T	R	L	${f T}$	R	L	T	R	1
	1			_1			_			1			
No. Lanes	1	2	1	1	2	2	1	2	0	_ 2	2	1	_
LGConfig) L	T	R	L	${f T}$	R	L	TR		L	T	R	1
Volume	174	555	413	153	556	1409	195	481	161	1091	335	82	1

Phas	se Combination	T	2	3	4	1			ב	6	1	8	
EB	Left	A				1	NB	Left	A	Α			
	Thru		A			1		Thru		A	A		
	Right		A			1		Right		A	A		
	Peds					1		Peds					
WB	Left	A				1	SB	Left	A				
	Thru		A			1		Thru			A		
	Right		A			1		Right			A		
	Peds					l		Peds					
NB	Right					ļ.	EB	Right	A				
SB	Right	A				i	WB	Right	A				
Gree	en :	15.0	35.0						15.0	8.0	22.0		
Yel	Low	4.0	4.0						4.0	4.0	4.0		
All	Red :	1.0	1.0						1.0	1.0	1.0		

Cycle Length: 120.0 secs

						CACT	e reud	th: 1	20.0	secs
		Interse	ction Pe	rformand	ce Summa	ary				
Appr/	Lane	Adj Sat	Rati	os	Lane (Group	Appr	oach		
Lane	Group	Flow Rate				•	* *			
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	_	
Eastbo	 and				······································					
L	215	1719	0.37	0.13	49.3	D				
T	1005	3445	0.60	0.29	37.2	D	33.4	С		
R	726	1583	0.46	0.46	22.8	С				
Westbou	and									
L	221	1770	0.75	0.13	65.3	E				
T	1005	3445	0.60	0.29	37.2	D	43.6	D		
R	1248	2722	0.92	0.46	43.9	D				
Northbo	ound									
L	401	1719	0.26	0.23	37.9	D				
TR	974	3341	0.67	0.29	39.0	D	38.8	D		
Southbo	ound									
L	430	3437	2.76	0.13	3224	F				
\mathbf{T}	650	3547		0.18	45.7	D	2376	F		
R	554	1583	0.12	0.35	26.6	С				
		tion Delay				nterse	ction	Los =	F	

Analyst: VRPA Technologies Inter.: Magnolia/ Riverview Pkwy

Area Type: All other areas Agency: SDC Date: 4/2/07 Jurisd: San Diego County Year : 2030

Period: AM

Project ID: Future with project

E/W St: Riverview Pkwy N/S St: Magnolia

12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0			- -	T C N N T T 7 P I		COTON CHAM	7 D V		
L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T T T R L T T T T R L T T T T R L T T T T R L T T T T R L T T T T R L T T T T R L T T T T R L T T T T R L T T T T R L T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T								Couth	phound 1
L R L T T R		*		•		-			
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Analyst: VRPA Technologies

Inter.: Magnolia/Riverview Pkwy

Agency: SDC

Area Type: All other areas Jurisd: San Diego County

Date: 4/2/07

Year : 2030

Period: PM

Project ID: Future with project

E/W St: Riverview Pkwy

N/S St: Magnolia

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TWO-WAY STOP CONTROL SUMMARY

Analyst: VRPA Technologies

Agency/Co.:

Date Performed: 3/12/2008

Analysis Time Period: AM

Intersection: Riverview Parkway / Pr Drive

Jurisdiction: City of Santee

Units: U. S. Customary

Analysis Year: 2030

Project ID: Future with project

East/West Street: Riverview Parkway North/South Street: Project Driveway

Intersection Orientation: EW Study period (hrs): 0.25

Intersection Orient	ation: I	≅W		St	udy	period	i (hrs)	: 0.2	5
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		L	T	R	-	\mathbf{L}	T	R	
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Peak-Hour Factor, P			1.00	1.00		1.00	1.00		
Hourly Flow Rate, H			609	7		17	801		
Percent Heavy Vehic						0			
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Move	ment	7	8	9	-	10	11	12	
		L	T	R	ı	L	T	R	
Volume		6		13					
Peak Hour Factor, P	HF	1.00		1.00					
Hourly Flow Rate, H		6		13					
Percent Heavy Vehic		0		0					
Percent Grade (%)			0				0		
Flared Approach: E	xists?/	Storage			1				/
Lanes		ĩ	1						
Configuration		L	R						
						,,			····
					_	'			
	_		ngth, an	d Leve hbound		i Servi		hbound	
Approach	EB	WB							
Movement	1	4		8	9	!	10	11	12
Lane Config		L	Ļ		R	1			
v (vph)		17	6		13		· · · · · · · · · · · · · · · · · · ·		
C(m) (vph)		974	224		69				
v/c		0.02	0.03		0.				
95% queue length		0.05	0.08			06			
Control Delay		8.8	21.5			.3			
LOS		A	С		В				
Approach Delay				13.8	_				
Approach LOS				В					
- L									

TWO-WAY STOP CONTROL SUMMARY

Analyst: VRPA Technologies

Agency/Co.:

Date Performed: 3/12/2008

Analysis Time Period: PM

Intersection: Riverview Parkway / Pr Drive Jurisdiction: City of Santee

Units: U. S. Customary

Analysis Year: 2030 Project ID: Future with project

East/West Street: Riverview Parkway North/South Street: Project Driveway
Intersection Orientation: EW

Intersection Orie	ntation:	EW		St	udy	period	(hrs):	0.2	5
	Vehi	cle Vol	umes and	Adius	tme	nts			
Major Street: Ap	proach		stbound	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			tbound		
	vement	1	2	3	1	4	5	6	
		L	T	R	i	L	$ar{ extbf{T}}$	R	
						_	_		
Volume	· · · · · · · · · · · · · · · · · · ·	***************************************	890	9		21	676		
Peak-Hour Factor,	PHF		1.00	1.00		1.00	1.00		
Hourly Flow Rate,			890	9		21	676		
Percent Heavy Veh						0			
Median Type/Stora	ige	Undiv	ided			/			
RT Channelized?	_			No					
Lanes			2 1			1	2		
Configuration			T R			L	${f T}$		
Upstream Signal?			No				No		
-									
Minor Street: Ap	proach	No	rthbound			Sou	thbound		
Mc	vement	7	8	9		10	11	12	
		L	T	R		L	T	R	
Volume		8		18					
Peak Hour Factor,	PHF	1.00		1.00					
Hourly Flow Rate,	HFR	8		18					
Percent Heavy Veh	nicles	0		0					
Percent Grade (%)			0				0		
Flared Approach:	Exists?/	Storage			/				/
Lanes		1	1						
Configuration		L	R						
			ngth, an			f Servi			
Approach	EB	WB		hbound				bound	
Movement	1	4	7	8	9	1	0 1	1	12
Lane Config		L [L		R	l			
v (vph)		21	8		18	_			
C(m) (vph)		764	159		56				
v/c		0.03	0.05		0.				
95% queue length		0.08	0.16		0.				
Control Delay		9.8	28.8		11	. 6			
LOS		A	D	16 0	В				
Approach Delay				16.9					
Approach LOS				С					

APPENDIX H

"Exerts from City of Santee Transportation Improvement Master Plan Information"

ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are more frequent.

Level of service E describes operations with delay in the range of 55.1 seconds to 80.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

Level of service F describes operations with delay in excess of over 80.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with oversaturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Table 2.2 lists the levels of service (LOS) of signalized intersections in the City of Santee. The intersections in bold are major intersections, as identified by City staff. The intersection rankings represent the top 10 congested signalized intersections in the City. Mission Gorge Road at Magnolia Avenue intersection has the highest congestion followed by Mission Gorge Road at Cuyamaca Street.

Table 2.2: Signalized Intersection Levels of Service¹

No.	Intersection	AM Peak	PM Peak	Rank
1	Mission Gorge Rd./Magnolia Ave.	D	F	1
2	Mission Gorge Rd./Cuyamaca St.	D	D	2
3	Mission Gorge Rd./Fanita Dr.	В	E	3
4	Mission Gorge Rd./Town Center Pkwy.	С	E	4
5	Mast Blvd./Magnolia Ave.	D	D	5
6	Mission Gorge Rd./Carlton Hills Blvd.	D	С	6
7	Magnolia Ave./Prospect Ave.	С	D	7
8	Mast Blvd./Cuyamaca St.	D	D	8
9	Mast Blvd./Carlton Hills Blvd.	С	С	9
10	Carlton Hills Blvd./Carlton Oaks Dr.	С	С	10
11	Carlton Hills Blvd./Willow Grove Dr.	Α	Α	
12	Carlton Oaks Dr. /Fanita Pkwy.	Α	Α	
13	Cuyamaca St./River Park Dr.	Α	В	
14	Cuyamaca St./Town Center Pkwy.	В	С	
15	Cuyamaca St./Buena Vista Ave.	Α	В	
16	Cuyamaca St./Prospect Ave.	С	С	
17	Magnolia Ave./Woodglen Vista Dr.	В	В	
18	Magnolia Ave./El Nopal	С	С	
19 ·	Magnolia Ave./Second St.	В	Α	
20	Magnolia Ave./Carefree Dr.	В	Α	
21	Magnolia Ave./Braverman Ave.	Α	Α	

¹ Intersection Levels of Service (LOS) was provided by the City of Santee.

Magnolia Avenue on the east, Mission Gorge Road to the south, and the San Diego River to the north.

New development typically results in an increase of traffic. A significant increase in traffic may reduce the effectiveness of an intersection, especially if it is formatted for a specific volume capacity. The priority corridors whose volume will be affected by the new developments may require signal timing and coordination adjustments.

Table 2.5 lists the future levels of service (LOS) of new signalized intersections and those that require improvements as a result of the Fanita Ranch and other future developments.

INTERSECTION	Peak H	our LOS	
	Before	After	Notes
Carlton Oaks Dr / Carlton Hills Blvd	F	D	Mitigation Required
Mast Blvd / West Hill Pkwy ³	F	С	Additional Lanes Required
Mission Gorge Rd / Fanita Dr ³	E	В	Additional Lanes Required
Mission Gorge Rd / Cuyamaca St	E	E	Additional Lanes Required
Mission Gorge Rd / Magnolia Ave ³	E	D	Additional Lanes Required
Woodglen Vista Dr / Cuyamaca St	F	С	New Signal
El Nopal / Cuyamaca St	F	С	New Signal
Woodside Ave / SR 67 Off-Ramp	F	D	Mitigation Required

Table 2.5: Future LOS Year 2010 and Beyond²

2.9 Capital Improvement Program (CIP)

The 5 year Capital Improvement Program (CIP) is scheduled for the Fiscal Years (FY) 2006 through 2010 and will be implemented based on community needs, available funding, prior City Council direction, and staff resources available to oversee the projects. Some CIP projects that may influence the recommendations in this Master Plan are listed below. For a detailed list of traffic related CIP projects, see **Appendix B**.

<u>Traffic Management Master Plan:</u> This project will provide funding for a consultant to prepare a Citywide Traffic Management Master Plan. The process will include review of existing conditions, assessment of current and future needs, evaluation of options for improvement, and preparation of an implementation plan. In order to better address traffic needs within the City, the preparation of Traffic Management Master Plan is needed. The Master Plan will concentrate on maximizing the effectiveness of our traffic signal system, while also comprehensively addressing all aspects of the City's transportation network. Approximately \$70,000 in Traffic Mitigation fees will be collected in FY 2005-2006. The "Transportation Improvement Master Plan", this project, is the outcome of this CIP project.

³ Source: Before and After Peak Hour LOS and Notes provided by the City of Santee on September 13, 2006.

² Source: Traffic Impact Analysis Report, "Village at Fanita" prepared by Linscott Law & Greenspan, September 19, 2005 (**Appendix B**). Mitigation should be implemented as recommended in the report and by the City of Santee.

Mission Gorge Widening: This project will widen Mission Gorge Road from Carlton Hills Boulevard to State Route 125 in response to forecasted traffic volume increases over the next decade. It is in accordance with the Circulation Element of the City's General Plan. The estimated cost is more than \$9.4 million. The proposed CIP designates nearly \$2 million in Traffic Mitigation fees to be collected over the next five years for this project. Planning and design is scheduled to begin in FY 2006-07, but construction may not begin until additional funding is identified.

Cuyamaca Street Improvements Adjacent to Town Center Community Park: Northbound Cuyamaca Street between River Park Drive and Mission Creek Drive is required to be widened for the development of Town Center Community Park. In addition to the street widening, a 25-foot landscaped parkway with a meandering sidewalk/bikeway will be included. This project provides better access to Town Center Community Park by widening Cuyamaca Street to major arterial standards to comply with the Town Center Specific Plan. The proposed CIP designates approximately \$2.3 million in Traffic Mitigation fees to be collected over the next two years for this project, beginning in FY 2006-07.

Olive Lane Improvements: Install missing curb, gutter and sidewalks and widen Olive Lane Road to a four lane collector between Mission Gorge Road and Via Zapador. Forecasted traffic volumes for 2020 and the Circulation Element of the General Plan show the need to widen Olive Lane. Curb, gutter and drainage facilities will be installed to control water runoff and sidewalks will be installed to improve pedestrian safety. Approximately \$4.6 million in Traffic Mitigation fees is expected to be collected over the next four years. The proposed CIP is set to begin in FY 2006-07.

SR 67/Prospect Avenue Interchange Improvements: Construct a new on-ramp from Magnolia Avenue to southbound SR 67 and widen the northbound SR 67/Prospect Avenue off-ramp to three lanes. The project, totaling \$5.3 million, will be funded and constructed by the Sky Ranch Developer and maintained by Caltrans, beginning FY 2006-07.

<u>Traffic Management Master Plan Implementation:</u> This project will provide software and hardware improvements to existing traffic signals throughout the City in order to maximize the effectiveness of the City's traffic signal system to improve traffic flow. Specific locations will be prioritized based on the recommendations of the Traffic Management Master Plan which is currently underway. Approximately \$800,000 in Traffic Signal fees are expected to be available for this program over the next five years, beginning in FY 2007-08. See the deployment schedule for details of the Master Plan recommended projects.

<u>Bicycle Master Plan Update:</u> Preparation of a new Bikeway and Pedestrian Master Plan to identify existing facilities and deficiencies throughout the City. The objective of the new Bikeway and Pedestrian Master Plan study is to review and make recommendations as to how the current bikeway and pedestrian network within the City planning area can be updated to best suit the needs of the City now and in the future. The existing Bike and Trail Study was prepared in 1989 and needs to be updated.

only left-turn operation to protected/permissive operation).

The above category of improvements would require different levels of financial commitment by the City depending on the needs of each specific intersection or roadway segment. The top 10 ranked intersections within the City (as identified by City staff based on intersection delay shown in **Table 2.1**) were examined for potential improvements. It should be noted that before improvement projects are developed, each intersection and proposed improvement should be reviewed and studied in more detail with reference to safety and efficiency. In particular the real-time level of service and volume-to-capacity ratios at each intersection should be measured and calculated and thoroughly analyzed.

3.1.3 Field Review

The initial step in identifying the deficiencies of an intersection is to asses its existing conditions. A detailed field review was conducted along with a detailed photo inventory of the 10 critical intersections. The improvements/enhancements were categorized into three groups: (1) signal, (2) geometry, and (3) operation, as described in **Section 3.1.2**. At each intersection, photos were taken and a quick sketch of the existing conditions and possible improvements was prepared. Measurements were taken to determine the existing location of visible advance loop detectors for calculating whether or not the detectors where placed outside of the dilemma zone (**Appendix A**).

3.1.4 Analysis

In addition to the field review and operational observation conducted, the levels of service at the 10 critical intersections were reviewed and further analyzed. The suggested improvements are based on a combination of engineering judgment, levels of service values, and the site geometric/right-of-way availability conditions. Detailed analysis will be needed during the developmental stages.

Table 3.4 is a summary of improvements that are recommended for the 10 critical intersections based on the on-site investigation. Following the table is a brief description of the recommendations for each intersection. As identified in the circulation element of the general plan and other future developments, some critical intersections require additional lane capacity to improve the level of service to acceptable standards.

Table 3.4: Summary of Potential Improvements at Critical Signalized Intersections

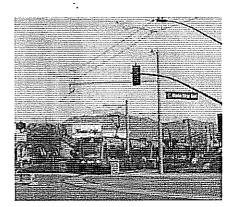
	PROPOSED ENHANCEMENT
INTERSECTION	Signal Modifications
Mission Gorge Rd & Magnolia Ave	Relocate advance loop detection for the westbound traffic
Mission Gorge Rd & Cuyamaca St	Upgrade signal/trolley equipment
Mission Gorge Rd & Fanita Dr	Relocate advance loop detection for the northbound traffic

INTERSECTION	PROPOSED ENHANCEMENT Signal Modifications
Mission Gorge Rd & Town Center Pkwy.	Relocate advance loop detection for the northbound traffic
Magnolia Ave & Prospect Ave	Install Caltrans compliant 170 signal controller and cabinet
Mast Blvd & Cuyamaca St	Relocate advance loop detection for westbound traffic
Mast Blvd & Carlton Hills Blvd	Relocate advance loop detection for westbound traffic

Mission Gorge Road & Magnolia Avenue

Based on the field observation, the eastbound, westbound and southbound thru movements may require additional modification. The observations to increase capacity for these movements were conducted; however, field investigations indicated that there is no room for additional capacity in all directions. As for minor modifications, **Appendix A** indicates that the westbound advance loop detection is currently placed within the dilemma zone. Therefore, the westbound advance loop detectors should be relocated to at least the Caltrans suggested minimum setback distance of 285 feet.

Mission Gorge Road & Cuyamaca Street



Mission Gorge Road and Cuyamaca Street is the intersection with the highest accident rate in the City of Santee. This intersection is shared by the Green Line Trolley and recent ITS enhancements were installed. Video detection is used for the light rail traffic and a CCTV monitoring camera is already in place to monitor the traffic at this busy intersection. Green time is taken from the eastbound and westbound thru movements to serve the light rail movements, which are also very frequent. Mid-range and long term improvements include upgrading traffic signal equipment to provide better trolley and vehicle traffic flow through the Cuyamaca Street corridor. Also, a northbound

right-turn lane as a long-term capacity enhancement to potentially improve the current level of service should be further analyzed.

Mission Gorge Road & Fanita Drive

It is recommended that the northbound advance loop detectors be relocated to a distance of at least 230 feet away from the stop line to avoid the dilemma zone (**Appendix A**). It is observed that future developments may congestion the eastbound and westbound movements; therefore, further investigation is recommended as new developments are deployed.

Mission Gorge Road & Town Center Parkway/Olive Lane

The northbound advance loop detectors are only 153 feet away from the stop line, which is below the Caltrans minimum requirement of 185 feet.

Mast Boulevard & Magnolia Avenue

There is a high school on the northeast quadrant of Mast Boulevard and Magnolia Avenue. The City may want to consider generating coordination/flush plans to accommodate for the quick, yet heavy, school peak periods throughout the day.

Mission Gorge Road & Carlton Hills Boulevard

Mission Gorge Road and Carlton Hills Boulevard is a three legged intersection with many closely spaced driveways on the south side without any traffic signal to monitor the flow in and out of the shops. Therefore, it is recommended that further analysis be conducted for the consolidation of the south side driveways and an additional northbound signal. As future development occurs on the south side of the street, consolidation of the driveways will occur.



Magnolia Avenue & Prospect Avenue

Construction for a new on-ramp to SR 67 will occur in the next year as part of a condition of approval for the Sky Ranch Project. The existing traffic signal controller should be changed to a Caltrans compliant controller so that communication with the Caltrans signals will be possible. This feature will allow for smoother traffic flow at this intersection.

Mast Boulevard & Cuyamaca Street

The westbound advance loop detector set-back distance is located 169 feet. This distance is within the dilemma zone, a distance closer to the stop line than the Caltrans recommended set-back distance. Therefore, it is recommended that advance loop detectors be relocated to at least 230 feet for westbound traffic. Mast Boulevard and Cuyamaca Street was also evaluated for left turn operation modification; however, no operational change is recommended because the combination of a vertical and horizontal slope creates a major visibility constraint.

PROJECTS	COST
P2: Installation of Protected/Permissive Left-Turn at other locations	\$ TBD
Description: Additional locations will be considered as they are identified by C	City staff.
P3: Continued Signal Coordination Improvements	\$ 100,000.00
Description: This project will prepare timing plans for signal coordination alon	g the priority corridors.
5% Contingency for Operation & Maintenance (Short-Term Projects)	\$ 7,500.00
INTERMEDIATE PROJECTS	
P4: Continued Signal Coordination Improvements	\$ 100,000.00
Description: Two to three years after the previous signal coordination imp	rovement, plans would
need to be revised again to accommodate the changes in traffic and signal of	peration.
P5: Traffic Control System (TCS) Upgrade	\$ 782,500.00
Description: This pilot project includes the installation of the BI Tran C	
hardware and the replacement of the existing controllers with Type 170 c	ontrollers at two major
corridors (Mission Gorge Road and Cuyamaca Street) and TSP at 5 intersect	
P6: Deployment of Video Detection at Major Intersections	\$ 83,000.00
Description: Concurrent with paving projects, this project will install video de	
approaches at two locations – Magnolia Avenue at Mast Boulevard and Miss	
P7: Install Communication along Gaps in the Traffic Signal System	\$ 967,000.00
Description: This project recommends closing the interconnect gap along	
Mission Gorge Road and Cuyamaca Street concurrent with or before the TS installing interconnect along Magnolia Avenue from Mast Boulevard to the TN	
5% Contingency for Operation & Maintenance (Intermediate Projects)	\$ 96,500.00
	\$ 30,000.00
LONG-TERM PROJECTS	
P8: Critical Intersection Improvements	\$ TBD
Description: As development occurs, potential improvements critical in	
implemented, which include operation improvements, signal modificated enhancements as directed by City staff.	mons, and geometric
P9: Continued Signal Coordination Improvements	\$ 100,000.00
Description: Every 2 to 3 years after coordination plans have been modified	
the plans be reviewed again, especially since projects are being implemented	
P10: Remote Traffic Control Workstation at Sheriff's Department	\$ 64,000.00
Description: After the TCS upgrades on Cuyamaca Street, a new rem	
telephone line, at the Sheriff Department should be communicating via the ne	
P11: Continued Traffic Signal Control System Upgrade	\$ 360,000.00
Description: Once the first two corridors are upgraded and fully func	tional, major corridors
intersecting Mission Gorge Road or Cuyamaca Street, should begin their con	troller replacement.
P12: Installation of CCTV Cameras at Critical Intersections	\$ 390,000.00
Description: During or after the controller upgrade, installation of the prop	
cameras should also be deployed. There are a total of 10 recommended CC	
P13: City of Santee TMC Capacity Expansion	\$ 390,000.00
Description: Depending on the progress of ATIS, ATMS, and communica	
TMC is recommended to be upgraded once a large portion of the enhancement	
P14: Web-based Traveler Information Dissemination	\$ 60,000.00
Description: With all the new developments, especially the extension of SR greatly benefit from a web-based traveler information guide.	52, the community Will
	\$ 78,000.00
P15: Deployment of Trailblazer Signs Description: Trailblazer signs should be placed along Mission Gorge Road	
52/SR 125) and Magnolia Avenue (South of Prospect to SR 67) to guide traff	
P16: System Integration	\$ 390,000.00
	•
Description: During the planning stages of the TMC expansion, system integr	anon should be a large

PROJECTS	COST
factor in the final design.	
P17: Continue to Install Signal Interconnect System	\$2,006,500.00
Description: Major corridors, which still require interconnect include Mast Boulevert, Prospect Avenue, Carlton Hills Boulevard, and Magnolia Avenue. Motonsist of fiber, twisted pair, and wireless.	
P18: Roadway Improvements	\$ TBD
Description: Widening of lanes, extension of corridor, and other roadway important	rovements.
Contingency for Operation & Maintenance (Long-Term Projects)	\$ 192,000.00
TOTAL (Short-Term, Intermediate, and Long-Term Projects)*	\$ 6,219,500.00

^{*} Total cost does not include projects whose costs remain to be determined (TBD).

The development of operations and maintenance (O&M) policies and procedures and their associated costs is an important strategy to ensure that the implemented projects will be fully and efficiently operated for the life of the improvements. An O&M plan, even a brief one, should be developed and refined at each stage of implementation. This plan should address both the deployed (field and central) elements and the components of the communication system. It should address staffing requirements for operation and for maintenance and also the opportunities for sharing of duties and responsibilities between them.

Many of the proposed Santee projects probably will not require additional staff for operations and maintenance beyond the current levels. It is anticipated, however, that several of the intermediate and long-term traffic signal upgrade projects will require additional operating staff and additional annual cost of maintenance. Added staffing resources of approximately ½ time of a full time engineer (about 4 hours per day) may be needed to operate and trouble shoot the upgraded and expanded traffic management system. For a city having approximately 100 signals, a minimum of 2 fulltime staff are normally required for operations and a crew of about 5 maintenance technicians required for overall maintenance of the traffic signal system. For City of Santee budgeting purposes, it is initially suggested that approximately 5% be added to the cost of each project for operations and another 5% for the maintenance cost during the useful life of the project. A more detailed estimation of resources and costs should be prepared when the initial set of ITS improvements are tentatively selected.

6.2 Staged Implementation

Implementation of the 19 projects discussed in Section 6.1 will vary based on available funding, community needs, resources, and response to the first phase implementations.

6.2.1 Construction Packaging

Each project may be implemented as a package with other relevant projects, with future CIP projects, or individually. The decision to group projects or keep them separate will be dependent on available funding. Whether projects remain as individual or packaged projects, such as controller upgrade and interconnect system, the implementation should occur concurrently.

6.2.2 Implementation Costs

A conceptual cost implementation schedule is shown below in Table 6.3.

SIREEI NAME	LIMITS	DESCRIPTION		COST	STATUS
Cuyamaca St	River Park Dr - Mission Creek Dr	Widening, pedestrian and bike improvements	s)	2,262,600	CIP 07-03, Begin design
Cuyamaca St	River Park Dr - Town Center Pkwy	Sidewalk	\$	186,000	CIP 07-04
Cuyamaca St	Mesa Av - Mast Bl	Widening, pedestrian and bike improvements	€9	378,300	CIP 00-04, Completed
Magnolia Av	Chubb Ln - San Diego River	Sidewalk	€>	396,100	CIP 06-10, Contract awarded
Magnolia Av	Park Av - Chubb Ln	Sidewalk	8	143,100	CIP FY07-08
Mission Gorge Rd	SR 125 - Carlton Hills	Widening	S	9,447,300	CIP 07-08
Olive Ln	Mission Gorge - Via Zapador	Improve to 4 lane collector	\$	4,584,000	CIP 07-10
Prospect Av	Interchange with SR 67	Ramp improvements	₩	5,300,000	CIP 07-13
Woodside Av & Shadow Hill Rd		Intersection improvements	8	180,000	CIP 07-11
Prospect Av		Widening and undergrounding	69	20.075.000	Future CIP
Buena Vista Av	Cottonwood Av - Railroad Av	Widening	ક્ક	422,200	Future CIP
Civic Center Dr.	B St - Town Center Pkwy	Widening	8	2,625,000	Future CIP
Cottonwood Av	Park Av - Mast Bl	Widening	\$	12,768,000	Future CIP
Cuyamaca St	Mast Bl - Lafe Dr	Widening	\$	1,821,900	Future CIP
Cuyamaca St	Town Center Pkway - Mesa Av	Widening	s	9,226,300	Future CIP
Fanita Dr	Prospect Av - Mission Gorge Rd	Widening	\$	1,273,600	Future CIP
Fanita Dr	Southern City Limit - Prospect Av	Widening	8	22,938,200	Future CIP
Graves Av	Pepper Dr - Prospect Av	Widening	8	1,341,600	Future CIP
Graves Av	Prospect Av - Northerly End	Widening	8	207,300	Future CIP
Lake Canyon Dr	Fanita Dr - Settle Rd	Widening	ક્ક	527,600	Future CIP
Magnolia Av	Mission Gorge Rd - Chubb Ln	Widening	€÷	3,395,300	Future CIP
Mast Bl	Los Ranchitos Rd - Eastern City Limit	Widening	ક	3,601,800	Future CIP
Mesa Rd	Southern City Limit - Prospect Av	Widening	क	1,269,300	Future CIP
Mesa Rd	Prospect Av - Mission Gorge Rd	Widening	S	294,200	Future CIP
Prospect Av	Mesa Rd - Cuyamaca St	Widening	()	30,071,200	Future CIP
Railroad Av	Mission Gorge Rd - Prospect Av	Widening	69	2,525,400	Future CIP
Town Center Pkwy	B St - Cottonwood Av	Widening	()	5,775,000	Future CIP
Town Center Pkwy	Cottonwood Av - Magnolia Av	Widening	()	2,625,000	Future CIP
Magnolia Av & Mission Gorge Rd		Intersection improvements	€9	3,309,200	Future CIP

Meyer, Mohaddes Associates
 B - 3

STREET NAME	LIMITS	DESCRIPTION	COST	STATUS
Mission Gorge Rd & Cottonwood Av	A A A A A A A A A A A A A A A A A A A	Intersection improvements	\$ 335,600	Future CIP
Mission Gorge Rd & Cuyamaca St		Intersection improvements	\$ 382,000	Future CIP
Mission Gorge Rd & Fanita Dr		Intersection improvements	\$ 338,100	Future CIP
Magnolia Av & Prospect Av	de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contraction de la contra	Intersection improvements	\$ 338,000	Future CIP
Carlton Hills Bl	Gorge Av - San Diego River	Median improvements	\$ 820,000	Future CIP
Cuyamaca St	San Diego River - 950' south	Median improvements	\$ 546,000	Future CIP
Magnolia Av	Chubb Ln - Braverman Dr	Median improvements	1,200,000	Future CIP
Magnolia Av	Kerrigan St - 2nd St	Median improvements	\$ 1,880,000	Future CIP
Mast Bl	Fanita Pkwy - Carlton Hills Bl	Median improvements	1,100,000	Future CIP
Mast BI	Magnolia Av - Los Ranchitos Rd	Median improvements	\$ 1,857,000	Future CIP
Mast Bl	Cuyamaca St - Magnolia Av	Median improvements	000'886 \$	Future CIP
Mission Gorge Rd	Civic Center Dr - Magnolia Av	Median improvements	\$ 1,857,000	Future CIP
Woodside Av	Magnolia Av - SR 67	Median improvements	\$ 1,311,000	Future CIP
	Northerly terminus to southerly			To be constructed with
Cuyamaca St	boundary of Fanita Ranch	Street extension	Dev. Funded	development
				To be constructed with
Magnolia Av	Princess JoAnn - Cuyamaca St	Street extension	Dev. Funded	development

PROJECTS	Unit	Quantity		Unit Price		Total Cost
P1: Reinstallation of Advance Loop Detection at Critical Intersections						
Relocation of advance loop detectors at critical intersections (per approach)	EA	5	\$	8,000.00	\$	40,000.00
Design and Construction Management				30%		12,000.00
P2: Installation of Protected/Permissive Left-Turn at Other Locations						·
Prot/Perm Left-Turn operation as directed by City Staff		TBD		TBD		TBD
P3: Continued Signal Coordination Improvements	-		<u> </u>			
New/Modify intersection coordination plans	EA	50	S	2,000.00	\$	100,000,00
P4: Continued Signal Coordination Improvements	+-/		╫	2,000.00	Ψ	100,000,00
New/Modify intersection coordination plans	ΕA	50	\$	2,000.00	\$	100,000.00
P5: Traffic Control System (TCS) Upgrade	LA	50	Ψ.	2,000.00	Ψ	100,000.00
Upgrade to BI Tran QuicNet/4 System	EA	1	\$	200,000.00	5	200,000.00
Replace intersection controller with Type 170	-	25	 	16,000.00	\$	400,000.00
	EA	5	\$			
Trolley priority operation at intersection(s) near trolley line	EA	<u> </u>	\$	25,000.00	5	125,000.00
Design and Construction Management	-		 _ -	30%		217,500.00
Contingencies		1	\$	100,000.00	\$	100,000.00
P6: Deployment of Video Detection at Major Intersections	1		<u> </u>			
Install video detectioп at Mission Gorge Rd & Magnolia Ave	EA	4	\$	8,000.00	\$	32,000.00
Install video detection at Mast Blvd & Magnolia Ave	EA	4	\$	00.000,8		32,000.00
Design and Construction Management				30%	\$	19,200.00
P7: Install Communication along Gaps in the Traffic Signal System						
Fiber Optic along gap of Mission Gorge Road	ML	0.45	\$	250,000.00	\$	112,500.00
Twisted Pair along gap of Mission Gorge Road and Cuyamaca Street	MI	2.22	\$	200,000.00	\$	444,000.00
Fiber Optic along Magnolia Avenue from Mast Blvd to City Hall	МІ	0.75	\$	250,000.00	\$	187,500.00
Design and Construction Management			T	30%		223,200.00
P8: Critical Intersection Improvements			t			
Trolley equipment upgrade, operational improvements, signal modification, etc.		TBD	\vdash	TBD		TBD
P9: Continued Signal Coordination Improvements	+ -	100	 	100		, 66
New/Modify intersection coordination plans	EA	50	\$	2,000.00	\$	100,000.00
P10: Remote Traffic Control Workstation at Sheriff's Department	150	30	ΙΨ	2,000.00		100,000.00
Install Traffic Control Workstation	EA	1	-	40,000.00	\$	40,000.00
	YR	4	\$	3.000.00	_	12,000.00
Lease phone line	114	4	1 3	3,000.00	\$	
Design and Construction Management			 	3076	Ψ_	12,000.00
P11: Continued Traffic Signal Control System Upgrade	+	0.5	-	40,000,00	_	400 000 00
Replace intersection controller with Type 170	EA	25	\$	16,000,00	\$	400,000.00
Design and Construction Management			 _	30%	_	120,000.00
Contingencies	_	1	\$	100,000.00	\$	100,000.00
P12: Installation of CCTV Cameras at Critical Intersections			<u> </u>			
Install CCTV camera at critical intersections	EA	10	\$	30,000.00	\$	300,000.00
Design and Construction Management				30%	\$	90,000.00
P13: City of Santee TMC Capacity Expansion						
Additional rooms	EA	3	\$	100,000.00	\$	300,000.00
Design and Construction Management				30%	\$	90,000.00
P14: Web-based Traveler Information Dissemination						
Web-based traveler guide	EA	1	\$	60,000.00	\$	60,000.00
P15: Deployment of Trailblazer Signs						
Install Trailblazer sign at Mission Gorge Road & SR 52/SR 125	EA	2	\$	20,000.00	\$	40,000.00
Install Trailblazer sign at Magnolia Avenue & Prospect Ave	EA	1	\$	20,000.00		20,000.00
Design and Construction Management				30%	_	18,000.00
P16: System Integration	_		1			
Upgrade Software	EA	1	\$	150,000.00	\$	150,000.00
Upgrade Hardware	EA	1	\$	150,000.00	\$	150,000.00
Design and Construction Management	+-/	'	۳	30%		90,000.00
P17: Continue to Install Signal Interconnect System			┢	30 70	۳	50,000.00
	BAI.	0.50	-	250,000,00	-	147 500 00
Replace existing twisted pair with Fiber Optic along Mission Gorge Road	MI	0.59	\$			147,500.00
Install Fiber Optic along the remaining major corridors in Santee	MI	6.48	\$	200,000.00		1,296,000.00
Install wireless communication	EA	2	\$	50,000.00		100,000.00
Design and Construction Management	-		ऻ—	30%	\$_	463,050.00
P18: Roadway Improvements			1			
Widening, extension, and other improvements	<u></u>	TBD	<u>1</u>	TBD	<u>L</u>	TBD
				SUB-TOTAL	\$	6,443,450.00
5% Conting TOTAL (Short-Term, Intermediate, and Long-Term Programs)	ngency	for Operati	ions	& Maintenanc	ę\$	322,172.50

^{*} Does not include projects whose cost is to be determined (TBD)

List of References

- 1. <u>Transportation and Traffic Report Format & Content Requirements</u>, County of San Diego, Land Use and Environmental Group, September 26, 2006.
- 2. <u>Transportation and Traffic Guidelines for Determining Significance</u>, County of San Diego, Land Use and Environmental Group, September 26, 2006.
- 3. <u>City of Santee Transportation Improvement Master Plan, Meyer, Mohaddes Associates, January 2007.</u>
- 4. City of Santee General Plan 2020.
- 5. <u>Santee Office Park Traffic Impact Analysis</u>, Linscott, Law & Greenspan Engineers, September 26, 2005.
- 6. <u>Brief Guide of Vehicular Traffic Generation Rates for the San Diego</u> Region, SANDAG, April 2002.



MEMORANDUM

TO: Shawn Shamlou, Dudek

FROM: Aditya Jatar, VRPA Technologies

DATE: August 22, 2007

RE: Traffic Analysis of Alternative Sites for Las Colinas Detention

Facility.

Two alternative sites are being considered for the relocation of existing Las Colinas Detention Facility.

The first site is located about 1800 feet northeast of the Santo Road interchange with the SR - 52 freeway. LOS conditions on the segments of SR - 52 to the east and west of the Santo Road Interchange were studied for the year 2030. Future basic traffic volume forecasts for the year 2030 for various freeways and roadways are provided by SANDAG. The network planned for future 2030 is provided by SANDAG in the 2030 Regional Transportation Plan. SR - 52 is shown to have six lanes with two additional managed lanes that function as reversible lanes during peak hour in the 2030 Regional Transportation Plan. For the purposes of determining the LOS conditions in the year 2030 the total number of lanes was assumed as ten lanes. The average daily traffic forecasts for the two segments for the year 2030 are as follows:

2030 ADT on the segment of SR – 52 west of Santo Road	164,000
2030 ADT on the segment of SR – 52 east of Santo Road	142,000

LOS on the segment of SR – 52 west of Santo Road	D
LOS on the segment of SR – 52 east of Santo Road	С

The second site is located near the existing East Mesa prison facility in Otay Mesa. LOS conditions on the segments of SR – 11 to the east and west of the future planned Enrico Ferni Drive interchange were studied for the year 2030. Future basic traffic volumes forecasts for the year 2030 for various freeways and roadways are provided by SANDAG. SR – 11 is a part of the future 2030 planned roadway network provided by SANDAG in the 2030 Regional Transportation Plan. SR – 11 is shown to have six lanes in the 2030 Regional Transportation

Plan. The average daily traffic forecasts for the two segments for the year 2030 are as follows:

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2030 ADT on the segment of SR – 11 west of Enrico Ferni Drive 87,000 2030 ADT on the segment of SR – 11 east of Enrico Ferni Drive 57,000
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LOS on the segment of SR – 11 west of Enrico Ferni Drive C
LOS on the segment of SR – 11 east of Enrico Ferni Drive B
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If you have any questions, please feel free to contact me. I can be reached at (858) 566-1766.